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Pamphlet on the Physically Handicapped - #1
Prepared by C. E. Stothers, Inspector of Auxiliary Classes,
Department of Education, Toronto.

THE ORGANIZATION AND OPERATION of SIGHT SAVING UNITS in ONTARIO SCHOOLS

N.B. The title was prepared on the magnatype typewriter to show what is meant by 24 pt. type. The paper on which the material is duplicated is a light-weight sight saving paper.

The Sight Saving Unit in Ontario

The Sight Saving Unit is an organizational device by which partially sighted pupils may be educated in Ontario if they reside in an area where a Sight Saving Class cannot or has not been organized. The teacher of an ordinary classroom undertakes to carry on Sight Saving practices and methods as well as she can. The Board agrees to provide special books and materials for which they receive some help from the Department of Education.

In general, children whose vision range is between 20/200 and 20/70, together with children suffering from progressive eye diseases may be admitted to a Sight Saving Unit. The condition of the pupil's eyes must be reported by a legally qualified oculist or optometrist.

The purposes of a Sight Saving Unit are:

(1) to reduce eye-strain and damage to the eye which comes from reading print which is too small; and to prevent the pupil from using his eyes for long periods at a time;

(2) to train the pupil to work in the best possible locations under the best possible lighting conditions and to practise eye hygiene;

(3) to educate pupils who, because of seriously defective vision, cannot be profitably educated if sight saving practices and materials are not used;

(4) to improve conditions which come from glare on paper, desks, blackboard or walls.

Establishing A Sight Saving Unit

Any school board may establish a Sight Saving Unit for a pupil by making application to the Department of Education. A form will be supplied which when filled in gives the following information:
(1) The name, age, grade, birthday and address and previous education of the child;
(2) The name address and qualifications of the teacher;
(3) The doctor's or optometrist's recommendations;
(4) The inspector's recommendation;
(5) The signature of the secretary and his official address.

When the application has been approved, the board is eligible for re-imbursement grants on equipment expenditures up to a maximum of ten ($10.00) dollars for each pupil for each year the unit is in operation.

Application for this equipment grant is made in June on forms supplied by the local inspector of schools.

Equipment for a Sight Saving Unit

Paper - The paper recommended for sight saving classes and units is of a rough finish and a deep cream in colour. It is desirable to have this ruled in lines 3/4" apart. The lines are usually a light green colour.

In some cases a liner is used under the sheet. Such a liner should be ruled heavily in India Ink.

If it is desired to have the paper in pads, this can be done by the teacher in the following way:

(1) Take 100 sheets of sight saving paper and after squaring up the edges press one edge of the bunch very tightly together;

(2) Apply a coating of glue to this edge and allow it to dry thoroughly.

Note: A press may be made by boring holes in 1" hardwood boards each 16" long and 8" wide. The holes should be bored 3/4" each way from the corners. If four 3" bolts with wing nuts are secured they can be used to provide pressure. As a substitute for the bolts, the teacher can use clamps ordinarily used on quilting frames.

National Stationers whose address is 115 York St., Toronto, supply a paper made specially for sight saving classes. The Gestetner Co. whose address is 117 King St. W., Toronto, have a thinner paper known as Gestetner Special #318 Buff, which is widely used. When the supply of paper is short the large sheets of drawing paper are a satisfactory substitute.

Writing Tools

(1) Pencils used should be the large kindergarten type with the blackest lead possible; Eagle Veriblack #315 is satisfactory.

(2) Chalk should be a buff or yellowish colour. The sticks should be as large as can be obtained.

(3) Pens should have a broad point. The following makes have been found suitable:

(a) Speedball Pen #4 Style C.
(b) Palmer's Roundline Point Manuscript #2 R.L.
(c) Myer's Roundwriter #4.
(d) William Mitchell's Rex Pen #0904.
(e) Esterbrook's Drawing & Lettering Pen #1.

Reading Materials

For about ninety per cent of sight saving pupils books printed in 24 point type are most suitable. The Department of Education has available for free distribution the following books in 24 point type:

(1) Ontario Speller, Bk I
(2) Ontario Speller, Bk II
(3) Junior Mathematics, Bk. I (selected pages).
(4) Junior Mathematics, Bk. II (Complete)
(5) Life & Literature, Bk. II (Complete in 3 volumes)
(6) About Susan (for Grade I)
(7) Limited editions of parts of the readers for GradesIII, IV and V.

There are no free readers for the pupils in Grades II, VI and VII. It is usual to use Life & Literature Bk. II for pupils in Grade VII & Grade VIII. Other books must be purchased by the board for use in Grade II and VI and for use as supplementary reading for all grades. A list of large type books has been prepared by the Inspector of Auxiliary Classes showing title, type size, and publisher. It is revised from time to time and is kept up-to-date for the convenience of teachers in ordering books for sight saving units.

A number of pupils have so little vision that they cannot use the regular sight saving books in 24 point type. There are a few books in 72 point type available for Grade I but beyond this grade the reading materials may have to be printed by hand. For this purpose the teacher should have a set of Speedball Lettering Pens, Style C. The size which is legible and intelligible to the pupil may be found by experiment. The teacher of such a pupil should remember that all the reading will have to be prepared carefully by hand in a plain Gothic type manuscript style without decorations on any of the letters. Work on the blackboard is suitable but will be erased.

Desks

A movable desk or table and chair may be necessary for pupils who are so short-sighted that they can only see the blackboard from a distance of from 2 - 5 feet. The movable desk may be left at the blackboard for this purpose if the pupil is given the use of another desk. Where desks are at a premium the movable desk may be placed at will in any place in the room where the lighting is good or at the blackboard.

Ezyrede Magnifier

Miss L. Helen DeLaporte, Assistant Inspector of Auxiliary Classes did some experimental work with magnifiers in sight saving classes. As a result the Ezyrede Magnifier may be purchased as equipment for partially sighted pupils if its use is recommended by a physician. It may be obtained through J. C. Williams & Co., Medical Arts Building, Toronto, for about seven dollars and fifty cents ($7.50). The Ezyrede Magnifier is designed for use with the dictionary and school reference books which are not available in large type. The teacher should be careful to use it only on the recommendation of a medical doctor.

Typewriter

This is not usually included in a sight saving unit as the equipment grant would not cover the expense. If a typewriter can be obtained through the parent or a service club the teacher should send a typewritten sample of the work done by the machine to the Inspector of Auxiliary Classes for approval.

Classroom Conditions Inherent In A Sight Saving Programme

Lighting - The pupil should work in a location where the illumination is not less than fifteen (15) foot candles. Thirty (30) foot candles is considered desirable.

There should be no glare resulting from uncovered bulbs and glossy reflecting surfaces (such as shiny blackboards, polished desks, glossy paper and paint).

Classroom decorations should not be such as to reduce the normal amount of natural illumination.

Translucent blinds should be installed for the purpose of reducing the effects of strong sunlight.

Seating - The pupil should sit in the second row from the window in the second front seat. W here the front desk is more than eight feet from the blackboard, the pupil should sit in the front desk or should have a movable desk placed not more than 10 feet from the blackboard.

No partially sighted pupil should have to face a window. In cases where a window may be partially or wholly visible it should be effectively screened.

Paint and Varnish - Flat paint on the walls and ceiling and dull varnish on the furniture should be the rule. The ceiling should be white and the walls buff, soft green or French gray.

If the desk is highly varnished some improvement can be obtained by using a light blue or light green blotter to cover the desk surface. Cover paper in large sheets will last longer than blotting paper.

General Information

Instruction for pupils with a very low degree of visual acuity was given originally in the schools for the blind. It was found that pupils would attempt to read Braille characters by sight rather than by touch. In 1909 M. Bishop Harmon opened a class in London, England for myopic patients. Later pupils with other visual defects were admitted. In Cleveland in 1911, pupils having considerable vision who had previously been assigned to classes for the blind, were permitted to make a moderate use of the blackboard and of school text-books under direct supervision of an oculist. In 1913 Boston opened a class for the so-called semi-seeing children. Cleveland removed from its classes for the blind all pupils who had learned to read Braille through their eyes rather than through their fingers. From 1920 onwards there has been a great expansion of provisions for saving sight. Toronto has five classes and London, Hamilton and Ottawa each have one. About 200 pupils are enrolled in Sight Saving Units in smaller places.

Surveys show that it is normal to find one child in each thousand of the school population who requires sight saving materials. Some surveys have shown that one pupil in every 250 requires sight saving methods and materials even after all the correction which can be obtained through the use of spectacles.

The results from the sight saving classes in Toronto show that all pupils have improved eyesight at the end of their elementary school course. There are five classes for children in Grades 2 - 10 inclusive. The Ottawa sight saving class has an excellent record of pupils who by reason of having practised

sight saving in the elementary school were able to proceed through their high school courses.

The available data on the employment of graduates shows a wide range of occupations. Myopes should be discouraged from office work although the near-sighted person is able to do close work most easily. Vocations for people who are partially sighted should be chosen so that the work will not damage the eyes.

Methods of Teaching the Three R's

"The point to remember in this work is that reading and writing and figuring are opthalmologically bad, but educationally to some extent required, and the actual practice has to be a compromise in which as much good as possible is to be got at the cost of as little damage as can be incurred". Kerr.

Arithmetic - Two aims must be kept in mind:
(1) that the child must be prepared for the practical arithmetic of everday life;
(2) that the child is held to regular grade standards in order to be promoted.

The teacher must decide whether or not to follow the course of study or to vary it. The lessons may be done in several ways:

(1) Oral Work - This is to the greatest value to sight saving class children. They should be trained to do many more processes mentally than the average class is required to do.

(2) Problems may be copied on paper with India Ink by the teacher (No. 4 Speedball or No. 1 Esterbrook Drawing and Lettering Pens). Where there are five or six in a class one problem can be copied on one sheet and the sheets distributed. The pupil can do these problems either on sight saving paper or on the blackboard.

(3) Special Number Devices - These should not be used unless the printed or written materials can be readily seen by the particular pupil.

(4) In a regular sight saving class the pupil may be sent to a regular grade class for the oral part of the arithmetic lesson. He returns to the sight saving class to do the examples which are corrected by the sight saving teacher.

Reading - The reading material for sight saving classes and units is as follows:

(1) The regular textbooks which have been produced in magnatype by the Ontario Department of Education. These are issued free to all regularly established classes and units. They are not available in all subjects or grades. (When the teacher reports on the progress of a sight saving unit in June of each year, she should indicate the grade to which her pupil has been promoted for September. If this is done, the free material will be sent automatically to the inspector for delivery in September.)

(2) The books produced in 24 pt. type by the Clear Type Publishing Committee, 36 Elston Road, Upper Montclair, New Jersey, may be purchased through the Renouf Publishing Co., 1433 McGill College Ave., Montreal. (Expenditures on these books may be counted as equipment. Selections from these publications appear in the list described below in #3.)

(3) A list of books in types varying from 18 - 72 point has been prepared by the Inspector of Auxiliary Classes. These books are for supplementary reading and to take the place of the regular texts when they are not available in magnatype (24 pt.) They can be ordered directly from Canadian publishers.

(4) Materials prepared in large print-writing by teachers (and pupils) on topics in Social Studies, Art, Health, etc. Such materials are necessary where the pupil is not able to read the regular 24 pt. type.

The pupil in the sight saving class or unit cannot go to the public library to get books because the type is not suited to his needs. If a child reads a book in ordinary type, he may possibly break down in one evening's reading all the good which has been accomplished in many days in the sight saving class or unit.

It is possible for the myopic pupil to read books in ordinary type but in so doing the degree of myopia may be increased. With far-sighted pupils, or hyperopes, the eyes are continually under a strain whether the work is close or at some distance. In some of the static cases the children simply cannot see small print and in attempting to see it the nervous strain is increased.

The teacher of a sight saving class or unit has to decide how little reading the pupil can do and yet keep up school progress. It is suggested that a reading lesson be omitted the day that a social studies lesson can be used for reading. The pupil's desire for stories can in part be met by having other pupils read for him in school; and his parents read to him at home. Enterprise work (except research) is considered suitable.

Writing - This is one of the essentials but it should be reduced to a minimum for children with seriously defective vision. The aim in a sight saving class or unit should be legibility not speed.

The type commonly used in books and newspapers is the most legible matter which we meet in ordinary use. The writing which is most legible is manuscript or print writing. The forms are simple, without unnecessary decoration, and recognizably similar to ordinary print. Its use makes it necessary for the sight saving pupil to learn only two forms instead of four.

The joined print stage (as described in the Programme of Studies for Grades I - VI) is the most advanced stage of writing which is desirable for sight saving classes and units. At this stage an individual signature can be developed in good size and form.

For children with established writing habits, it is difficult to teach print-writing. Teachers should demand that they adopt a vertical round-hand writing which will fit spaces about 3/4" high.

For sight saving pupils light strokes with pen or pencils or paper are taboo. In print-writing it is easier to use a kindergarten pencil than it is in ordinary cursive writing. The strokes can be made more uniform in width with a resultant increase in legibility.

The writing tools recommended are:

(1) Kindergarten pencil with the blackest lead available (Eagle Veriblack #315);

(2) (a) A Speedball Pen #4 Style C or (b) Palmer's Roundline Point Manuscript No. 2 R.L. or (c) Myer's Roundwriter No. 4 or (d) William Michell's Rex Pen No. 0904 or (e) Esterbrook Drawing & Lettering Pen No. 1.

(3) Chalk - This should be a yellowish colour - if print-writing is used the ordinary size is satisfactory but if cursive writing is used the stick should be up to one inch thick.

The Esterbrook Drawing and Lettering Pen No. 1 and Palmer's Roundline Point Manuscript No. 2 R.L. have a flat disk at the point. They are good for initial writing practice with the pen because they have to be held flat against the paper. This requires proper holding of the pen and aids in correcting habits which may have developed through writing with a pencil.

A very black ink is required. Some sight saving teachers have found that a mixture of half India Ink and half regular school ink answers the needs of the pupils. This reduces the expense and makes a very satisfactory ink. Teachers should experiment with small quantities before mixing up two bottles of ink since some of the modern inks are not ordinary chemical solutions.

Lines are not necessary for blackboard writing and if they are used the lines should not be white. If lines are desired they may be placed on the blackboard with black wax crayon. For beginners lines may be desirable and if they are needed they should be placed low on the blackboard to accommodate capitals three inches high and small letters one and one-half inches high.

Lines on paper should be 3/4" apart and should be printed light green. This colour has been found most satisfactory after trying out blue, purple and green lines on manila paper. Lines help in making written work clear and easy to read. In arithmetic it is not advisable to use lines. (A liner can be used with certain pupils. It should be made of white cardboard the size of the paper in use and should be ruled heavily in India Ink.)

Paper for written work should be a light cream colour without gloss. Duplicating paper can be purchased cheaply. The Gestetner Special No. 318 Buff is satisfactory. National Stationers put out a special sight saving paper.

Writing in sight saving classes causes a lot of discussion. The teachers agree on the following principles:

(1) the work must be legible.
(2) the writing should be simple and of the vertical type.
(3) the stroke should be even in width and without shading.

Typewriting - This subject is not taught as a vocation. The touch method must be used if sight saving is to be practiced. The typewriter may be introduced in Grade 5.

A music holder (or similar gadget) may be used to hold the lesson sheets which should be written (manuscript) out by the teacher.

The instruction may follow any of the standard teaching books. "High School Typewriting" Part I by Rozell & Hewitt (Gregg) is a suitable text.

As soon as the pupil has mastered the keyboard he may use the typewriter for regular school work. Spelling lessons are usually the first to be taken on the typewriter. The type used should be 24 pt. A Gothic type which is large, bold and clear is most satisfactory. A typewriter for bulletins is not satisfactory because it consists of capitals. Typewriter ribbons should always be black and of the variety known as "heavily inked".

Methods in Other Subjects

The following notes deal principally with the subjects in which the sight saving class teacher cooperates with the teacher of the regular grades. The pupil is sent to the regular grade classroom for oral instruction in social studies, language, science, art, and handwork and returns to the sight saving classroom to prepare the exercises which are checked by the sight saving teacher.

The sight saving unit is desirable because the same principle can operate without change of class. It does not segregate the pupils in a special classroom.

Social Studies - Note books may be a few sheets of wide-lined paper fastened together in a brown paper cover. Since texts are not available these provide a basis for review work.

Scrapbooks should be on large sheets. The pictures chosen should be large and in some cases the important features can be outlined in ink. A short explanatory note in large size manuscript writing should be placed below or at the side of each picture.

Blackboard maps should not contain much detail. This is true also of the desk maps the pupil is using for practice. The pupil should never be asked to trace or draw a map. A good sized form may be cut out of cardboard and given to the pupil who simply runs a pencil around the outside of the form.

Coloured wall maps are not much use to sight saving pupils if they contain a lot of detail. Silhouette maps are useful. They may be black on white or white on black and are pieces cut out and pasted on drawing paper. Blackboard cloth or paper can be secured from Moyer's School Supplies or Geo. M. Hendry and used for outline maps which can be drawn or painted. Names should not be written or printed on sight saving maps. A feature can be emphasized by a symbol which can be interpreted by a key.

Language - Much of this work can be done orally. All exercises should be answered in large manuscript or round-hand writing on sight-saving paper. Such exercises should be written out for the pupil by the teacher.

The exercises may be bound together for review work.

A child with normal vision may read aloud a book which is of mutual interest to him and the sight saving pupil. From this reading the sight saving pupil may write a book report.

Art, Handwork and Enterprise Work - Sewing and weaving have been abandoned as handwork in sight saving classes because the pupils at every opportunity use their eyes instead of the sense of touch. Basketry is defended on the ground that the child gains pleasure and some training although it is not directly useful.

Spatter work or spray painting or blue printing of leaves, flowers and small branches are interesting projects and quite easy on the eyes.

Knitting may be taken by both boys and girls if large coloured needles and wool of a contrasting colour are used. The child should not be allowed to work at it for too long a period. Once learned the action becomes automatic and the child has acquired a useful skill.

In Physical Training, Folk Dancing seems to be of particular value to sight saving pupils. It helps to remove awkwardness and is less danger to glasses than most other games.

No handwork should be given simply to keep the child busy while other grades are reciting. The sand table can be used to advantage if it always contains some project in the process of development. It should not be just an educational plaything.

Large murals and posters are recommended. These should be on a very large scale and should not contain much detail.

Coping saw work may be used if the pupils follow a heavy black pencil line. Draughting should not be given. The girls in a sight saving class or unit should take cooking and should write recipes in India Ink on wide-lined paper. The sheets can be bound into a notebook.

Eye Hygiene

The teacher should instruct the sight saving pupils on how to take care of their eyes. The child should not be allowed to become morbid on the subject of eyesight. They should not discuss eyesight problems with other pupils. Sight saving pupils should be taught to recognize their special limitations in the use of their eyes; to see the necessity for straight clean glasses; to be so conscious of light and lighting that they will always seek the best possible position for doing any reading, writing or close work; and to use the eyes for appropriate periods.

The teacher should take every opportunity to study eyes and to recognize from oculists' reports just what difficulty the sight saving pupil is facing. For this reason a short glossary of terms and a table of vision loss percentages is appended.

Glossary

Albinism - absence of pigment
Aniridia - absence of iris
Astigmatism - irregular refraction
Atrophy - loss of function
Amblyopia - loss of vision
Buphthalmia - glaucoma in a child
Choroiditis - inflammation of the choroid or vascular coat of the eye.
Cataract - an opaque formation of the crystalline lens.
Congenital Cataract present at birth.
Cornea - The transparent anterior part of the eye
Glaucoma - hardening of the eyeball
Hypermetropia - far sightedness
Hypermetropic astigmatism - far sightedness of an irregular character
Hyperopes - far sighted persons.
Iris - pigmented membrane behind the cornea perforated by the pupil
Keratitis superficial - inflammation of the surface layers of the cornea.
Lens - a lentil-shaped glass for refracting light.
Myopia - short sight
Nystagmus - a condition in which the eye is constantly moving.
Opthalmus Neonatorum - inflammation of the eyes from infection at birth.
Purulent Conjunctivitis - inflammation of conjunctiva with formation of pus.
Retina - the innermost tunic and perceptive structure of the eye, formed by the expansion of the optic nerve.
Retinitis - inflammation of the retina.
Strabismus - squint eye.

Table Showing Percentages of Vision Loss Indicated by the Snellen Fractions

Snellen Fraction		% Efficiency	% Vision Loss
20/20 or	6/6	100	0.0
20/30	6/9	91.5	8.5
20/40	6/12	83.6	16.4
20/50	6/15	76.5	23.5
20/70	6/20	64.0	36.0
20/100	6/30	48.9	51.1
20/200	6/60	20	80.0

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Irwin, R. B. - Sight Saving Classes in the Public Schools - Cambridge. Harvard University Press, 1920
Lawes, E. - Methods of Teaching Sight Saving Classes. New York. National Committee For the Prevention of Blindness, 1926.
Luckeish - The Science of Seeing - New York. Van Nostrand Co.
Park Lewis - What You Should Know About Eyes - Funk Wagnalls Co.
Peppard - Sight Without Glasses - Longmans Green.
Pamphlet - "Better Light, Better Sight" - Canadian Industries Ltd. Toronto.

N.B. - Teachers of Sight Saving Units may borrow any one of the above books for a period of 3 weeks by writing the Inspector of Auxiliary Classes, Dept. of Education, Toronto.

Pamphlets on the Education of the Physically Handicapped #2

Prepared by C. E. Stothers, Inspector of Auxiliary Classes
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RECOGNIZING AND RECORDING COMMON SPEECH DEFECTS

Department of Education, August 1943 - 800.

1. Introduction

This pamphlet has been prepared primarily for teachers who have in their classes pupils who lisp, stammer, omit or substitute letters, or display some other speech difficulty which may directly affect their progress in reading, spelling and vocabulary, or which may indirectly affect their progress in other school subjects. The data is presented for teachers in general that they may become more conscious of the need for speech training in the elementary schools.

When one watches a person making a public address, it is possible to observe the lip movements and also the very precise positions in which the tongue must be placed because he must open his mouth well to secure volume and penetration or carrying power. One Sunday in 1929, the writer noted that members in a certain rural church choir with one exception sang through almost closed teeth. The one exception was the school teacher who had learned something about speech during the year she was away from the school section attending Normal School.

The gross errors in speech are easily detected and noted, but it is not the habit of teachers to be precise in stating the specific difficulties. Many times each year, teachers report to the Auxiliary Classes Branch upon pupils with language handicaps and speech defects. Because the teacher describes the case in general terms, it is possible only to make general suggestions for training to overcome the handicap.

If the teacher would say that a pupil substitutes "yittle" for "little", it would be just as specific as describing inability to multiply by zero. Such a letter substitution is usually written "l---" to indicate that the error occurs when "l" is the initial letter of the word. Pupils may omit the endings "s, t, and d" and these are written "---s, ---t, ---d" to show that the error in these sounds occurs when they are in the final position. If the error is in the middle of a word such as "coat" for "court" it is written "---r---".

If the examples given in the previous paragraph were the errors of one pupil, they would be summarized as follows:-

(1) Letter substitutions:	l----
	---r---
(2) Omissions:	---s
	---t
	---d

Upon receipt of this information, the teacher could be directed to specify paragraphs in Amoss, DeLaporte et al - "Training Handicapped Children". If the remedial exercises and methods described in this manual proved insufficient, the library of Speech Correction books in the Auxiliary Classes Branch could be searched for more information.

By such means speech correction is being carried on successfully by regular classroom teachers who have not the services of a trained specialist, and who have not had the benefit of a special course in this subject. Without loss to other pupils, a very short period daily is found for training speech-handicapped pupils. The greatest success has come in eliminating letter-substitutions and lisps. In nervous speech disorders and cleft-palate speech, untrained teachers have had some marked successes.

These successes have probably been due to the application by interested teachers, of general teaching and training methods to the development of essential speech skills. All teaching depends upon an accurate appraisal of the pupil's needs, followed by an adequate growing experience which provides successful practice in situations of gradually increasing difficulty which are carried on until standards are achieved, or the limit of capacity is reached.

In speech correction, the problem of the teacher of a pupil who says "yittle for little" is not to train the child to place the tongue in position to say the letter "l". The child already does habitually place the tongue properly for the "l" when it is in the final position. It is necessary to train him to do this when "l" is in the initial position.

A workable method of doing this would be as follows:
(1) The teacher would demonstrate the tongue position for initial "l" in front of a mirror large enough for both the teacher and pupil to see each other's reflections. The mirror is needed in the initial stages to allow the pupil to check the tongue position and other speech movements. After the teacher demonstrates, the pupil attempts to copy the pattern.

(2) The pupil practices daily for three minutes, words and exercises chosen by the teacher from Training Handicapped Children. A small hand mirror may be used when the pupil has learned the tongue position.

(3) Supervised practice is continued until a standard satisfactory to the teacher is achieved.

For details of methods in speech correction, the teacher is referred to the following list of books which are available through the Auxiliary Classes Branch, to interested teachers, for periods not exceeding two weeks. One condition is that the teacher's name must appear in the latest edition of Schools and Teachers. For that reason a teacher must state the name or number of the school and the name of the school inspector when he or she requests books on Speech.

Amoss, DeLaporte ~~et al~~ - Training Handicapped Children - Ryerson.
Borden & Busse - Speech Correction - Crofts.
Bluemel - Stammering & Cognate Speech Defects - Stechert
Bryngelson B. & Glaspey E. - Speech Improvement Cards - Toronto, W. J. Gage 1941 (Scott Foresman & Co.)
Burrows & Hall - Games & Jingles for Speech Development
Gifford, M. P. - Correcting Nervous Speech Disorders, New York, Prentice Hall, 1940.
Cross, U. - Drill Exercises for Speech Correction Classes - Publication #305, Detroit Board of Education 1941.
McAllister, A. H. - Clinical Studies in Speech Therapy - Toronto, Clarke Irwin, 1937, Univ. of London Press.
McAllister, A. H. - Steps in Speech Training, - Steps 1-2-3-4-. Toronto, Clarke Irwin, Univ. of London Press.
Peppard - The Correction of Speech Defects - Macmillan.
Schoolfield - Better Speech and Reading.
Stoddard, C. B. - Articulation Test I - Publication #137 Detroit Board of Education, 1942.
Stoddard, C. B. - Pupil's Guide For Speech Correction, Publication #160 Detroit Board of Education, 1937.
Stoddard, C. B. - Sounds for Little Folks, Bk. I (281), Book III (#283), Book IV (#284), Detroit Board of Education, 1940.
Travis - Speech Pathology - Appleton.
Wilson, R. - Rythm and Rhyme, Books I, II, III, IV, Toronto, Nelson.

II. Recognizing Speech Disorders

In order to recognize specific speech defects, it is necessary to describe them accurately. The following are examples of those which are frequently observed:-

1. Letter substitutions - The pupil has not learned to say certain sounds and substitutes some other sounds for certain letters.

		Record shows
Examples:	eeyeven for eleven	l-------
	shirts for church	ch----ch
	bastick for basket	---k----

2. Omissions - Instead of substituting, the pupil omits certain sounds- usually endings. The omission of "S" may be a defect which is similar to a lisp.

		Record shows
Examples:	block for blocks	-------s
	whip for whipped	-------d
	port for sport	s-------
	fass for fast	-------t

3. (a) Lisps - Ordinary lisps may occur when the tongue does not channel the air column or when the tongue is placed too far forward between the teeth or when a front tooth is missing.

		Record shows
Examples:	thithter for sister	s---; ---s---
	nithe for nice	----s

(b) Lateral lisp - This is the name given to the lisp caused by forcing the air around both sides of the tongue. The air column is not channelled or directed properly.

		Record shows
Examples:	schling for sling	s------

4. Stammer - A person is said to stammer when his speech is marked by
(1) Retardations, e.g.- Uncle John---(pause for a struggle to utter the next sound unit)---had lived on---(similar pause)---the frontier while a whole generation---(similar pause)---grew to maturity.
(2) Repetitions, e.g.- M-m-m-ary had a l -l-l-ittle d-d-d-oll.
(3) Accelerations, e.g.- One day they---(pause)---went all the way to the ---lake. (The words are jerked out in groups.
(4) Prolongations, e.g.- Ffffather sssays thththat nnnumerous cccomplaints.
(5)The use of starters e.g.-
(a) Ah-ah-ah-It was quite late-ah
(b) (And) Aunt Mary---(now)-told John and Mary (and, and)--that after the ship--(and) left the harbour
(6) Arythmical grouping or phrasing e.g. John has a wh/--- white rat. It has bright eyes, fine/--- hair, small /--- ears and a /---long tail.

5. Cleft Palate Speech - This is marked by undue nasality and failure to direct the air column through the teeth and lips.

6. Foreign Speech - letter substitutions characteristic of certain nationalities. Examples - Yust for just, 'ouse for house, vell for well.

III. Recording Speech Defects

A record sheet should provide specific information about the pupil's speech difficulties. Since diseases have been proven to be causes of speech disorders, a medical history is helpful. Physical defects such as cleft palate, polypi, dental mal-occlusion and large tonsils should be noted. The speech defect should be classified and the outward oral manifestations should be stated in specific terms.

One of the exercises often given in a speech course is the gathering of a set of pictures which the speech teacher can use for testing pupils orally. The set of pictures must illustrate words which will exemplify as many sounds as possible in the initial, medial and final positions. With this set of pictures the teacher can record the speech errors while the test is being conducted. This set can be used with a printed record sheet on which each error is circled. At the completion of the examination the errors should be classified as letter substitutions, omissions, etc. A competent speech examiner can record the errors on a plain sheet of paper under appropriate headings. Printed examination picture cards and record sheets can be purchased.

In field work with children who are strange, familiar nursery rhymes and numbers are useful in securing a natural response. It is a natural and familiar school situation to the child if he is asked to count or to repeat a nursery rhyme in whole or in part, line by line.

In making a speech examination, one should examine the pupil's nose, mouth, teeth, palate and throat to see if there have any defects which would help to explain his defective speech. Structural handicaps such as the following have come within the writer's experience:-

(1) One boy swallowed frequently and with difficulty. He had abnormally large tonsils which had to be forced apart each time he swallowed.

(2) A boy had a peculiar mal-occlusion of his front teeth. The two lower front teeth grew inward and did not engage the upper teeth. The teeth, being unconfined, had grown wedge-shaped and prevented normal tongue movements.

(3) A girl had a cleft palate open from the back of the mouth to the front as if it had been cut. Where an operation has been performed a small opening may remain. The teeth may be out of position after an operation.

(4) A high narrow arch has been noted. If there is doubt about describing this, the teacher can check by looking at the roofs of the mouths of children with normal speech.

(5) A pupil with poor school abilities had a tongue which was not diametrically symmetrical. One side was the proper shape while the other appeared to be undeveloped.

(6)Evidences of biting the tongue may be noted.

(7) One teacher carried on speech correction for lisping for six months, when a visitor discovered that much of the difficulty was due to an undeveloped tooth.

(8) A stuffed nose affects speech tone and modulation.

(9) A broken or crooked nose may have one nasal passage partly blocked.

IV. Recording Speech Errors

A speech examination record embodying the features described above is included in this pamphlet. It provides for the following:

(1) Medical History of Childhood Diseases.
(2) Classification of the Speech Defect.
(3) Physical Defects affecting speech.
(4) Recording spaces for (a) Numbers
(b) Nursery Rhymes
(c) Picturable Words.

(5) Sketches showing various teeth, tongue, palate and throat conditions. The teacher can sketch in coloured pencil any variations which appear to be affecting speech.

(6) Speech Summary. The Speech Examination Record has been filled in to show the actual responses of one pupil tested recently. This child had poliomyelitis at three years of age; at the time of the examination she was eight years of age and reading "A Garden of Stories" . She lisps and has various letter substitutions. Copies of blank record sheets may be obtained by a request addressed to the Inspector of Auxiliary Classes.

(7) Six sheets containing seventy-two drawings are included in this pamphlet. The drawings are intended to be used by the pupil who is undergoing examination, as they correspond to the words in Section III of the Speech Examination record.

This set of drawings is intended to be a substitute for a set of coloured pictures which the teacher would collect for herself. The set will be more useful if some of the pictures are coloured. An example is number 64 which is intended to represent an orange.

In using these drawings, the teacher will find it necessary to question pupils to elicit the desired word. If the set were perfect, the pupil would name each word readily and the examiner would record the whole set quickly. Similar difficulties occur with sets of pictures printed in colour. The pictures are for the purpose of preventing a situation whereby the pupil repeats the model given by the examiner. In number 6 the desired response is teeth, and it may be necessary to phrase a question as "What does this little girl show when she laughs?" Number 26 and number 34 require the response of "eggs" and "nest" respectively. If the pupil responds with "a nest. There are five eggs in it."the same response will do for both cases.

SPEECH EXAMINATION RECORD

Name .....Birthday .....Grade .....

Date .....School.....Place .....

Teacher's and Nurse's Report - Underline the juvenile and other diseases the pupil has had. If possible give the year. Measles - Mumps - Whooping Cough - Scarlet Fever - Poliomyelitis - Mastoid - Earache. Write in this space any diseases which the pupil has suffered, giving the approximate age of the pupil at the time he had the disease.

Indicate the kind of speech handicap of this pupil by underlining the proper word. Lisp - Lateral Lisp - Letter Substitution - Foreign Speech - Nasality - Hesitation - Blocking - Stammer or Stutter - Cleft Palate Speech - Monotone - Delayed Speech.

Indicate as well as possible by underlining the words any physical defects which might affect the pupil's speech. Broken nose - Polypi - Deflected Septum - Cleft Palate - High or Narrow Palate - Dental Malocclusion - Set Upper Lip - Short Upper Lip - Very large tonsils - Long and much wrinkled tongue.

Sections I or II or I & II may be omitted.

Section I.

If the pupil can count say "Starting at one, count until I tell you to stop". Circle any letter substitutions. Repeat the counting if necessary. one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty - thirty - forty - fifty - sixty - seventy - eighty - ninety - hundred.

Section II.

Rhymes - Say to the pupil "Say this rhyme after me". Circle any letter substitutions.

A. I had a little pony

His name was Dapple Gray

I lent him to a lady

To ride a mile away

She whipped him, she lashed him,

She rode him through the mire,

I would not lend my pony

For any lady's hire.

B. Little Boy Blue

Come blow your horn

The sheep are in the meadow

The cows are in the corn

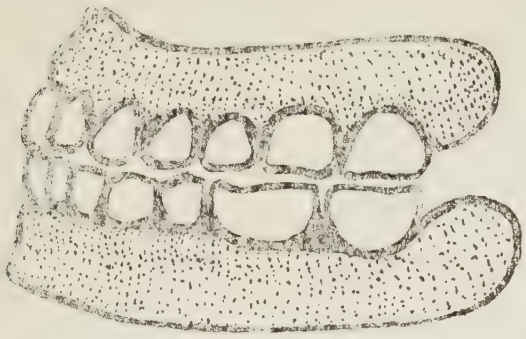
O, where is the boy

Who looks after the sheep

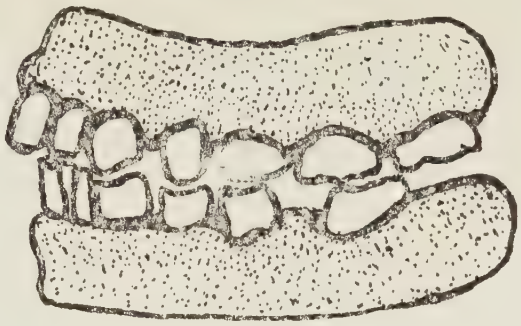
He's under the haystack

Fast asleep.

EXAMINER PLEASE NOTE:- These diagrams are to assist the examiner to record physical conditions which affect speech. Written notes and sketches in red pencil should be used. The notes and pencil sketches may be made on any of the diagrams.

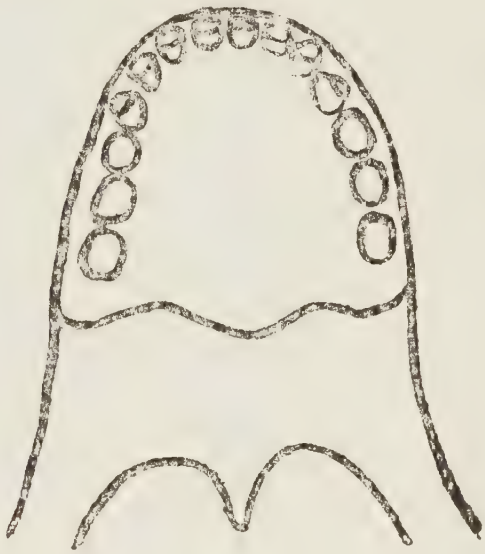


1. Side view of good occlusion of teeth.

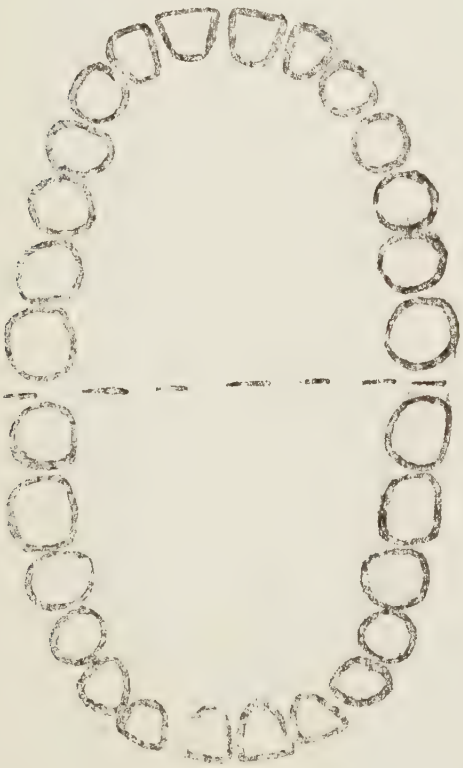


2. Side view of mal-occlusion due to loss of six-year molars.

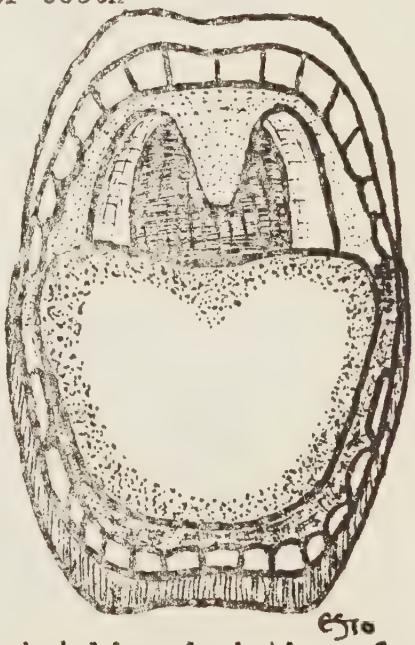
3. Side view showing distended front teeth and poor bite.



4. Diagram of hard and soft palate. Sketch in cleft palate or operation scars and placement of teeth



5. Diagram showing upper and lower teeth. Use it to show missing or almost completely decayed or badly aligned front teeth.



6. Diagram for sketching deviations from normal in tongue and uvula.

Section III.

Pictures - Say to the pupil "Tell me the name of each of these pictures. Give me one row at a time." Circle the letters on which the pupil makes errors.

1.	Shoe	Wishbone	Fish	37.	Ring	Carrot	Car
4.	Thumb	Toothbrush	Teeth	40.	Boat	Baby	cob
7.	Cent	Bicycle	Horse	43.	Wheel	Wagon	Hat
10.	Fork	Elephant	Leaf	46.	Yellow	Ring	Ink
13.	Tree	Kettle	Hat	49.	Chicken	Watch	Queen
16.	King	Basket	Book	52.	Blue	Flag	Star
19.	Pig	Apple	Cup	55.	Bell	Book	Engine
22.	Dog	Window	Bird	58.	Green	Sleigh	Stairs
25.	Green	Eggs	Frog	61.	Cone	Clock	Box
28.	Letter	Violin	Spool	64.	Orange	Door	Vest
31.	Monkey	Hammers	Comb	67.	Pail	Grapes	Spoons
34.	Nest	Window	Cone	70.	Teeth	Whistle	Oilcan

Section IV.

SUMMARY

Letter substitutions	Omissions	Lisp
---l	---d	---s
---r---	---s---	sh ---
wh---	---t	thr---
---r		th ---
th ---		---sh
---k---		
ch---		
---ch		
qu---		
fl---		
st---		
v---		

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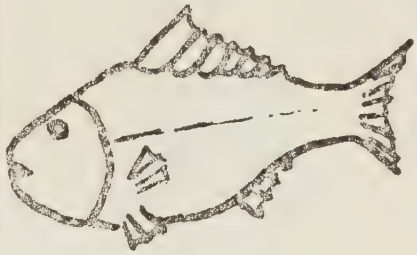

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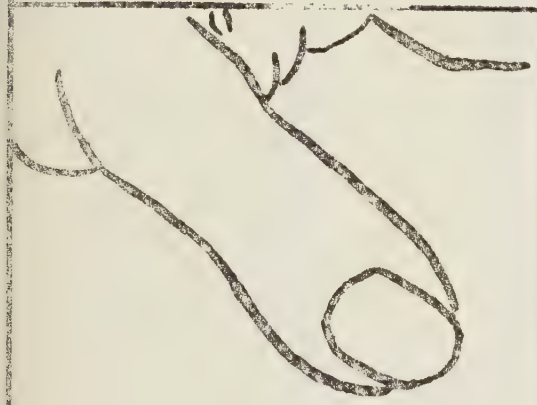

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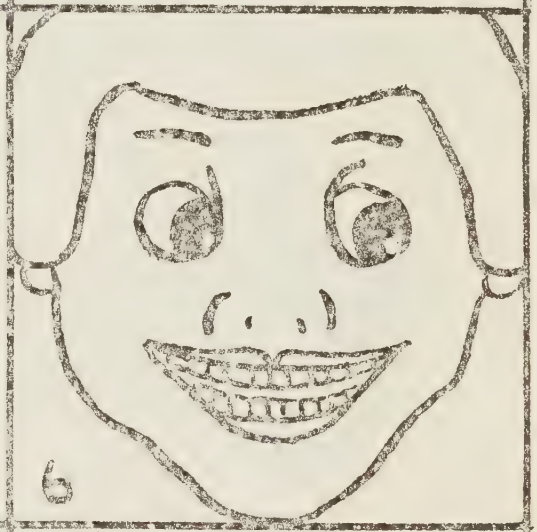

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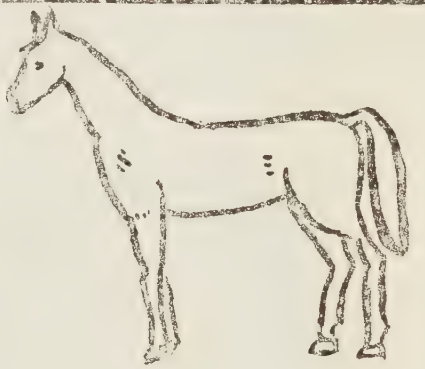

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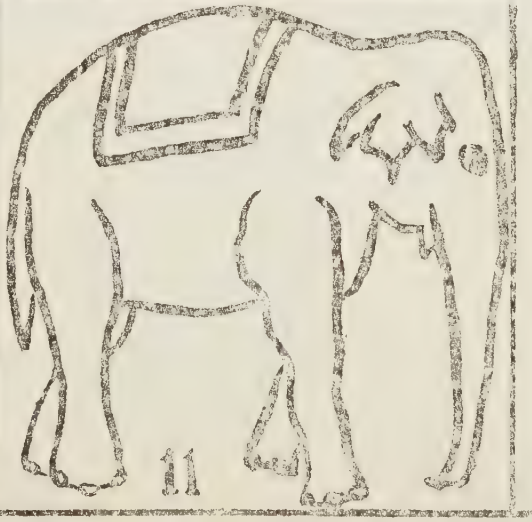

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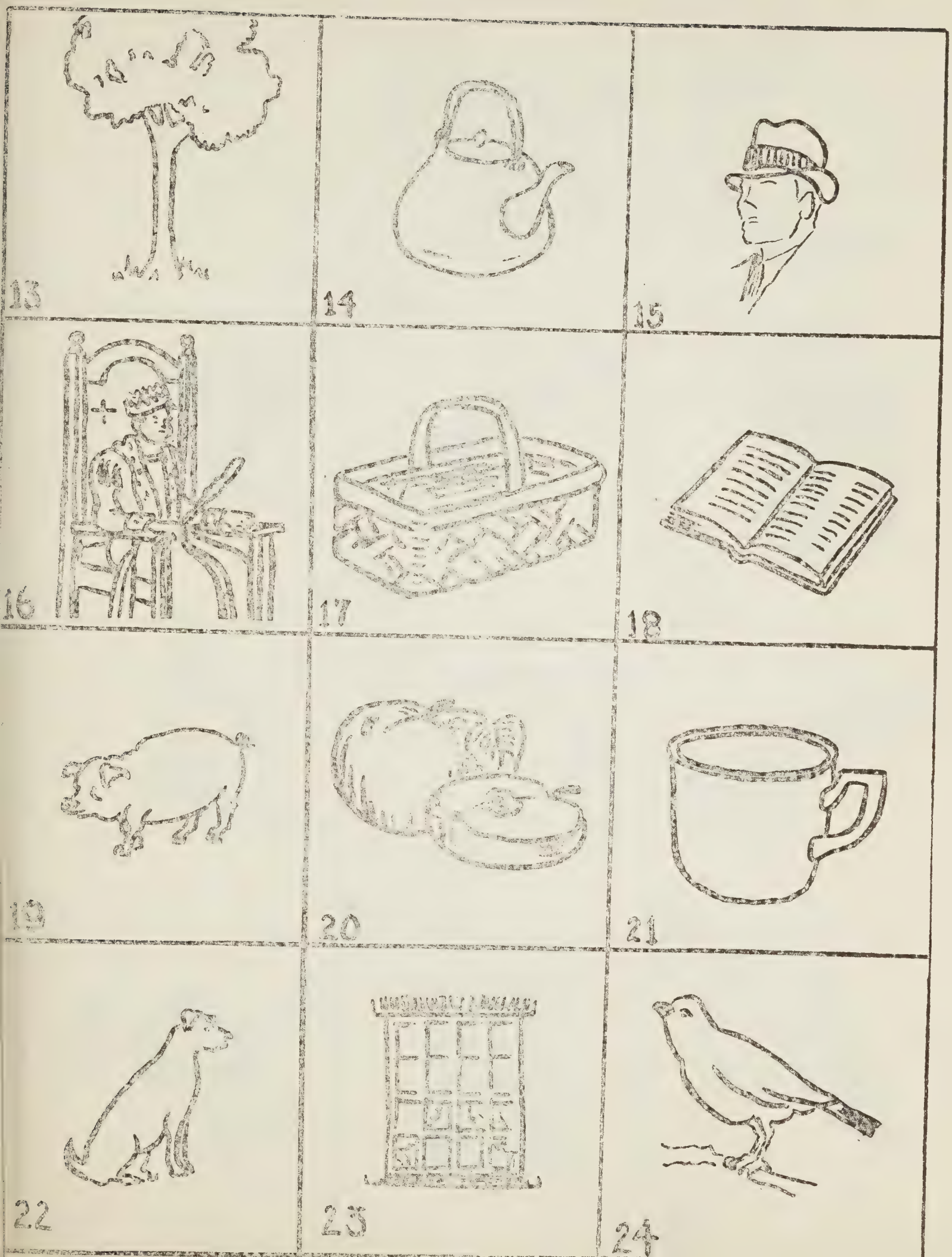
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green paper in

this space

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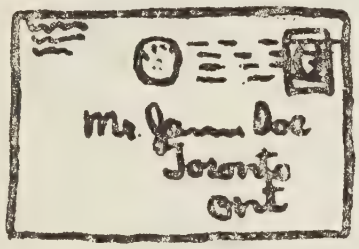

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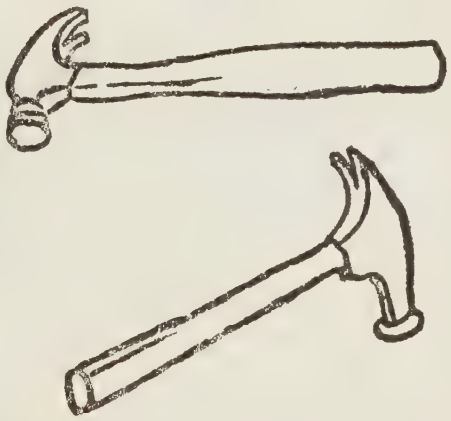

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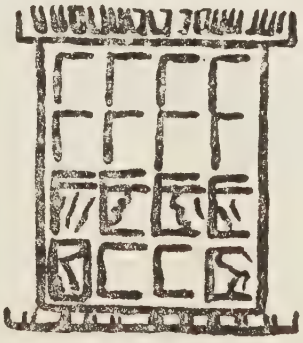

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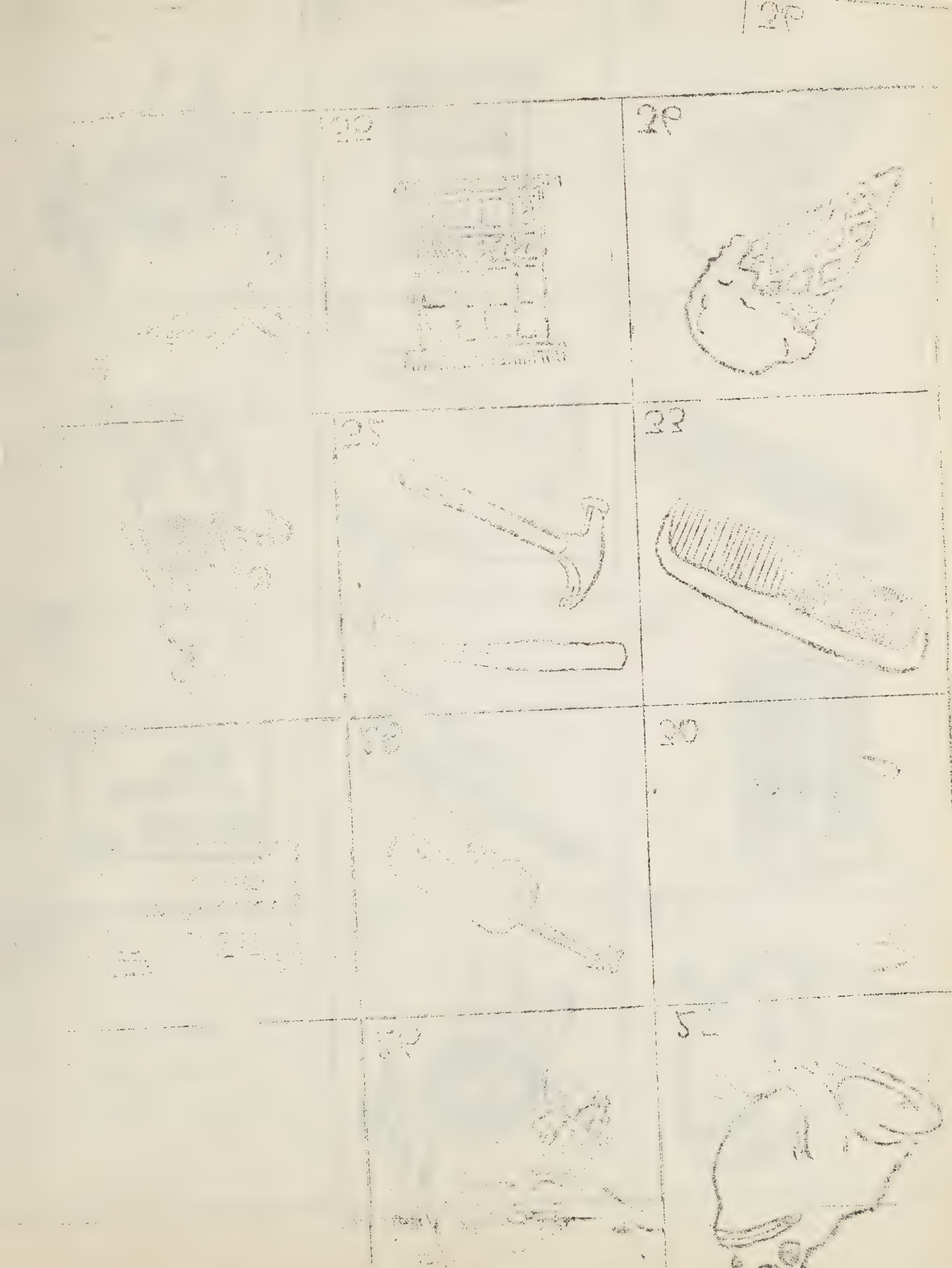

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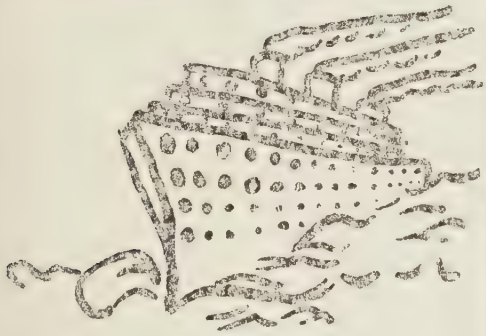

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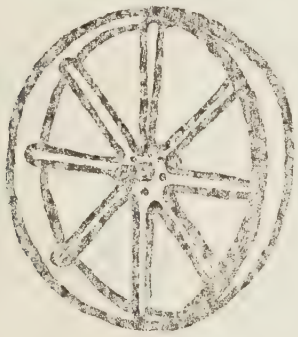

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yellow paper in

this space.

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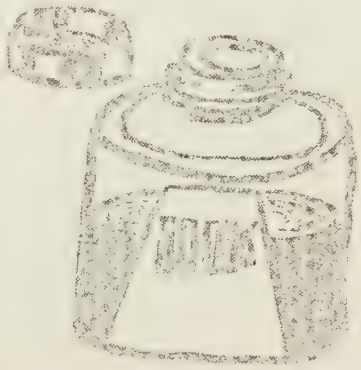

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the [illegible]
on this space

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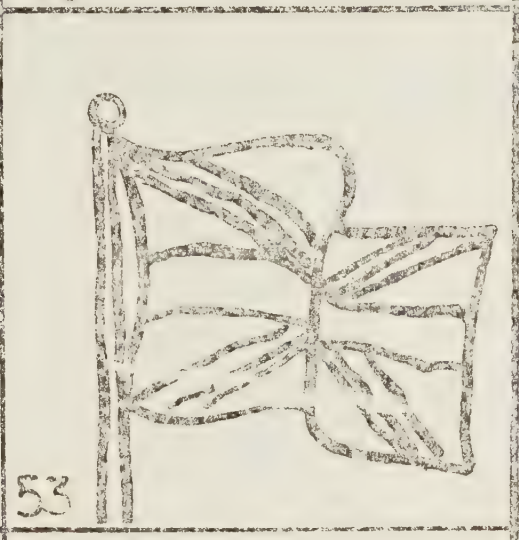

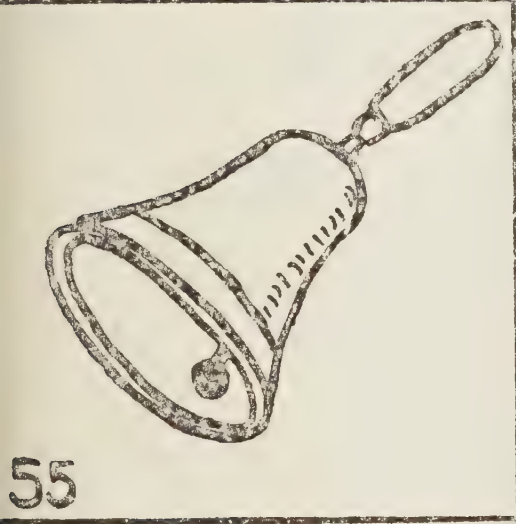

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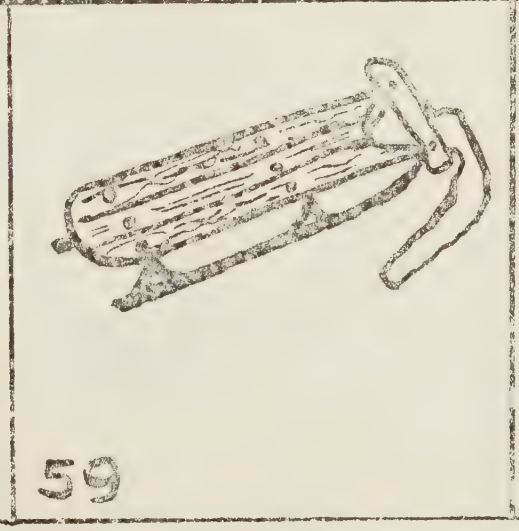

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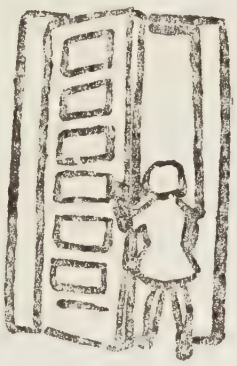

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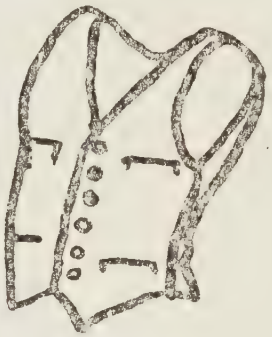

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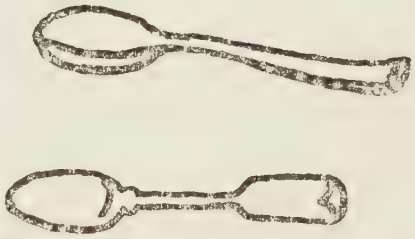

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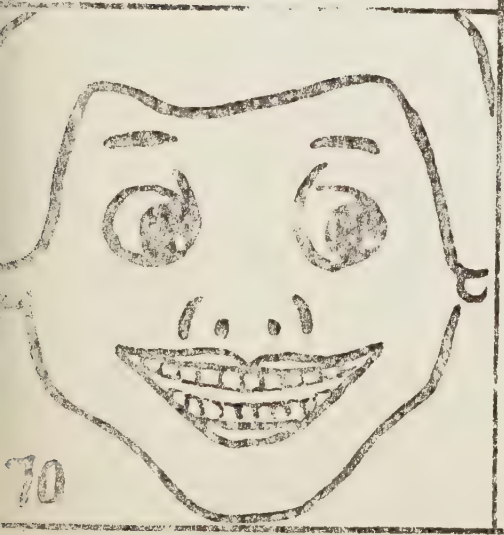

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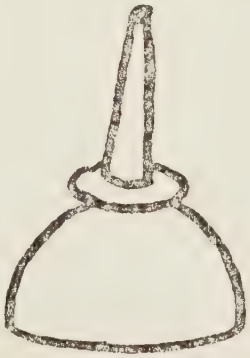


72

THE CARE OF THE BABY

This little book has been prepared as a guide to teachers instructing adolescent girls in baby welfare. The notes for lesson plans have been contributed by Miss M. Willson of the Edith L. Groves School, Toronto. They are the result of her experience in teaching this subject to hundreds of children. Miss Willson has kindly consented to release these for the use of other teachers. The content of the notes has been checked to correlate with the latest information released by the Ontario Department of Health.

The drawings were contributed by Miss Phyllis Overend, Boulton Avenue School, Toronto, Ontario.

L. Helen DeLaporte.

Assistant Inspector of Auxiliary Classes.

BATHING THE BABY

LESSON 1.

A baby should have a bath every day.

The bath should be given just before the 9 or 10 o'clock morning feeding.

The bath water should feel warm (not hot) to the elbow.

PREPARATION

All the small things necessary for the bath should be kept on a tray.

The clean clothing for the baby, towels, the pad for the table and the tub of water should be ready before the baby is taken up for his bath.
Last of all before lifting the baby the mother should wash her own hands.

THE BATH

The baby should be taken from his bed, placed on the pad on the table and his nightgown taken off, over the feet.

His nose and ears are cleansed with a piece of absorbent cotton moistened with water.

His eyes and face are washed with clear water using the wash cloth.

The head is soaped and is then held over the tub and rinsed.

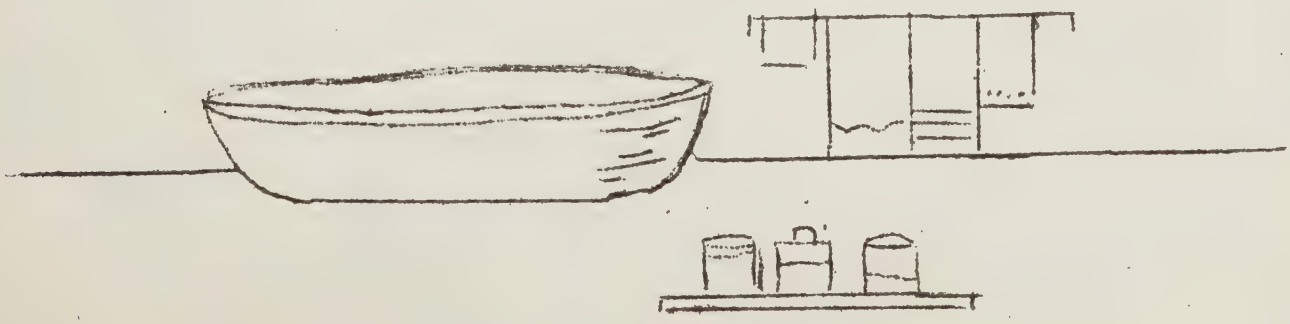
The diaper is removed and if necessary the buttocks cleansed with absorbent cotton moistened with oil.

Then the shirt is taken off.

The baby is soaped all over, using the hand, is lifted carefully into the tub and his body is rinsed, using the wash cloth.

He is taken out of the tub, placed on part of the towel and covered with the remainder of the towel.

He is patted dry, a little oil is applied in all the creases of his skin, using the finger. This oil in the creases is then wiped off with absorbent cotton.



THE CHILD'S CLOTHING

LESSON 2.

In the daytime the baby wears a diaper, shirt, stockings, gertrude and dress, with a knitted jacket if necessary for warmth.

When the baby is awake the diaper should be changed whenever it is wet or soiled.

The shirt should be changed once daily unless it is wet and needs changing oftener.

The stockings should be pinned to the diaper, but loosely enough that the baby can straighten his legs.

Stockings and shoes should always be longer than the baby's feet.

If a baby's head and body are perspiring he is too warm and some clothing should be removed. If his feet and hands are cold, he is cold and some clothing should be added.

The baby should not wear rubber pants.

When a child begins to creep, he should wear rompers.

When a child begins to walk, he should wear pants not diapers.

He should wear shoes with firm soles.

At night the baby wears a diaper, shirt and nightgown. The baby need not be wakened to be changed.

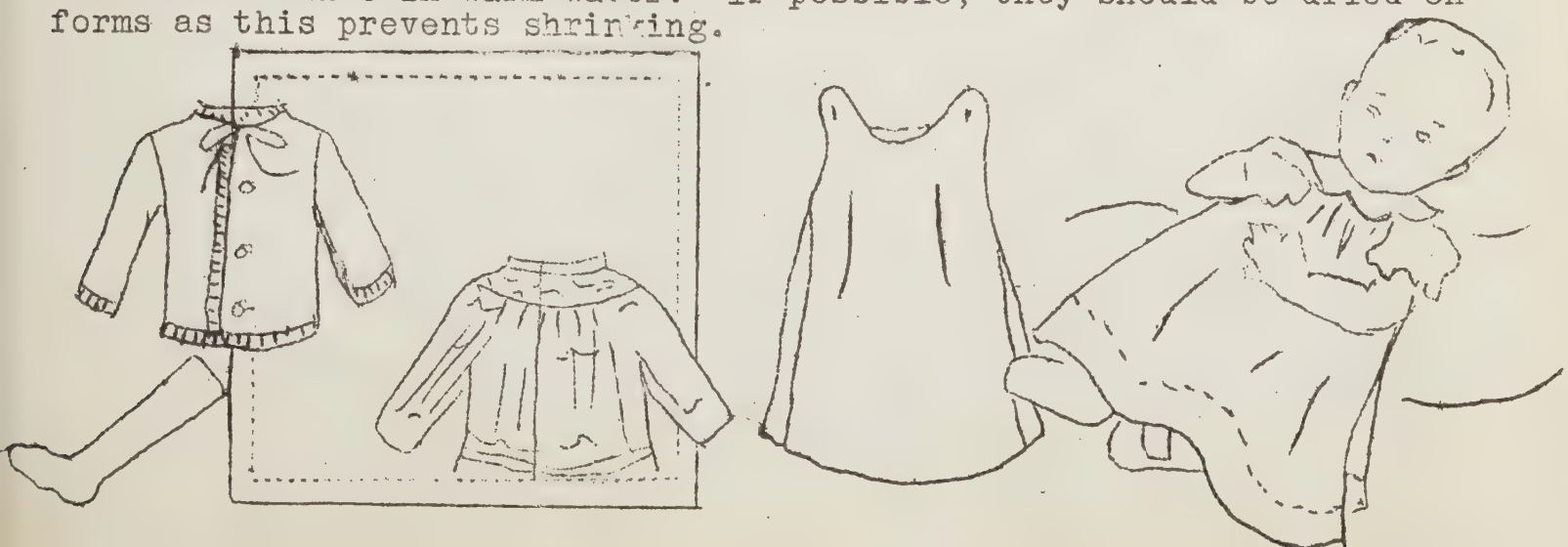
WASHING DIAPERS.

Soiled diapers should be rinsed in cold water immediately and kept in a covered pail until it is time to wash them.

Diapers should be washed in hot water and plenty of mild soap, boiled 10 minutes then rinsed through several waters and if possible hung in the sun to dry. All trace of soap should be removed.

WASHING WOOLLEN CLOTHING.

Woollen clothing should be squeezed, not rubbed, in warm soapy water and rinsed twice in warm water. If possible, they should be dried on forms as this prevents shrinking.



THE CHILD'S SLEEP

LESSON 3.

Babies must sleep alone.

A good bed for the young baby can be made from a market basket.

The bed should be made up with a mattress, rubber sheet, sheet, quilted pad, top sheet, blanket and spread. Baby is better without a pillow. Use a folded blanket or pillow for mattress.

The young baby should be fed and placed in his basket. He may or may not sleep.

When baby is a little older, he should sleep in a cot or crib. In buying the cot, the mother should be sure that the paint has no lead in it. (or other harmful substance).

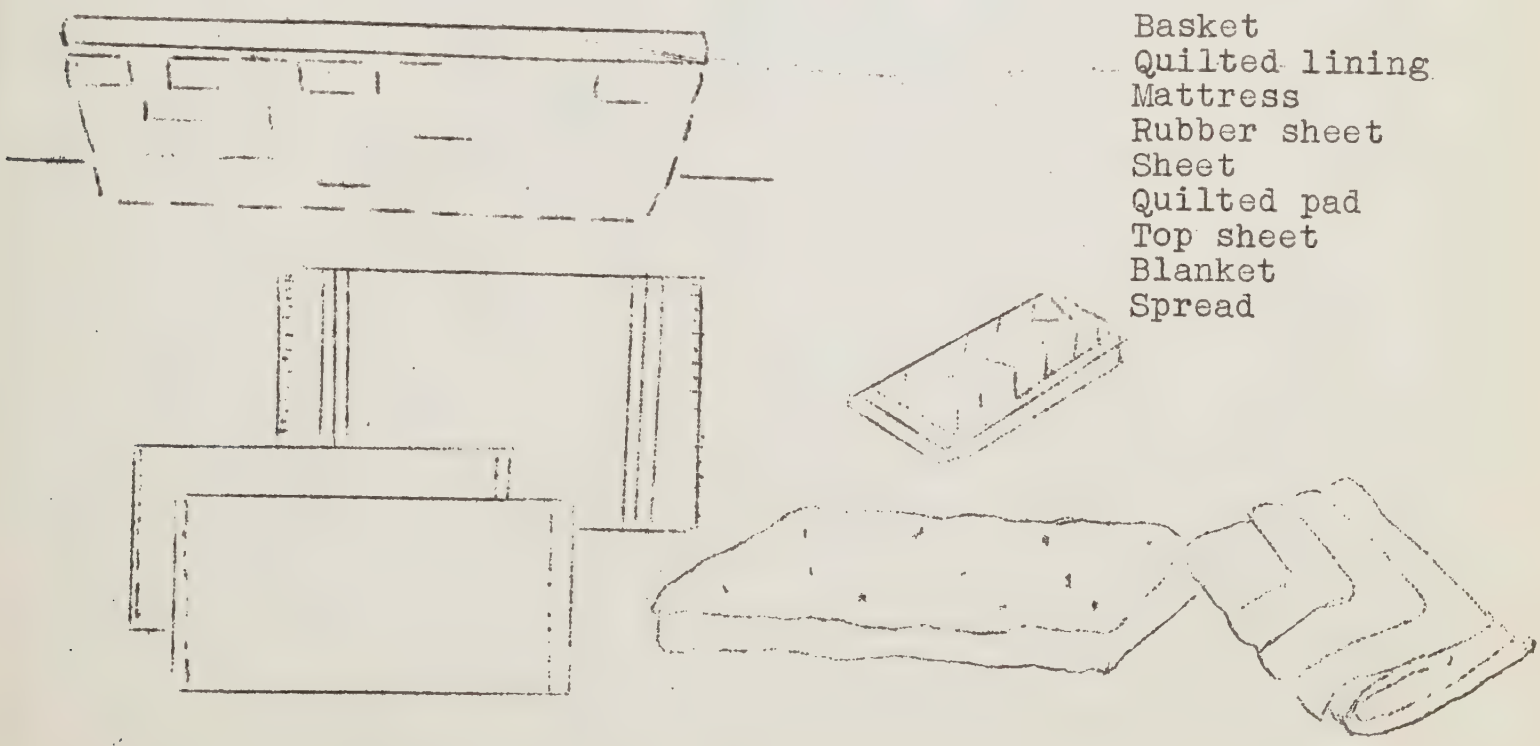
A baby should sleep out of doors part of every day, except in very cold or very wet or very windy weather. In winter he should be warmly covered. In summer mosquito netting should be put over the basket, crib or carriage to keep flies away from the baby.

It is not necessary for everybody in the house to be absolutely quiet when the baby is sleeping. However, there should be no very loud noises.

The baby should not always lie in one position in bed. He should sleep first on one side then on the other.

When a child is about a year old, he usually has only daytime sleep every day. This is usually from 1 to 3 in the afternoon.

The young child should go to bed every afternoon for a short time even if he does not sleep.



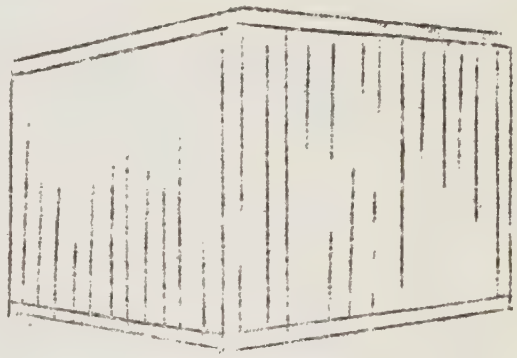
EXERCISE AND PLAY

LESSON 4.

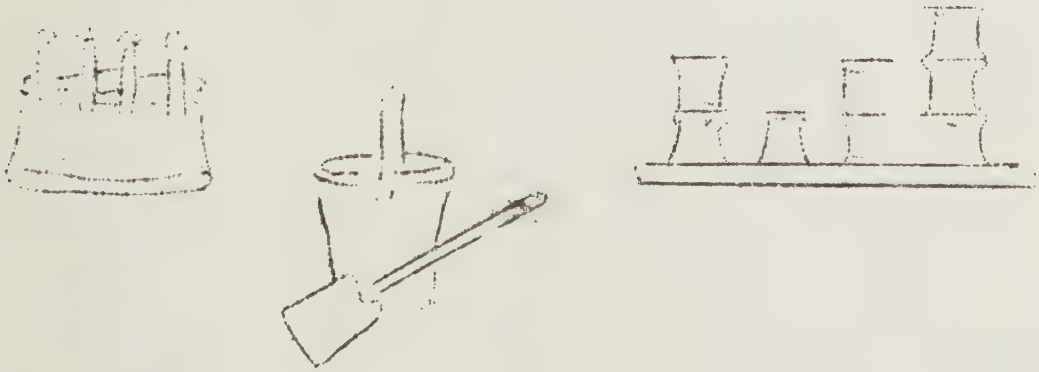
For some part of every day the baby should lie on his bed or on a large bed or couch, and kick.

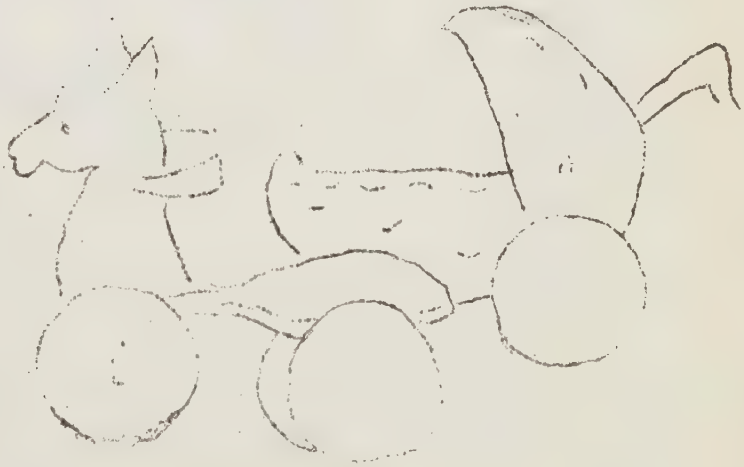
When the baby begins to creep, he should have a play pen or kiddie coop to play in.

Toys for the young baby are rattles, rubber dolls, stuffed animals or dolls, bright coloured wooden beads on a string. No toy animal should have eyes that may be pulled out.



When the baby is older, he may be given balls, large blocks, empty tins and jars of various sizes with covers, boxes with covers, large spools, clothespins, sandbox, spoon and pail, kiddie car, doll carriage, waggon.





BREAST FEEDING

LESSON 5.

Mother's milk is the best food for a baby because:-

It is easy to digest.
It is clean.
It never spoils.
It needs no preparation.
It is cheaper than bottle feeding.

The baby should be nursed regularly every three or four hours, as the doctor advises.

The mother may sit up or lie down to nurse the baby. If she sits up, she should sit in a comfortable chair, with a footstool. She should not be disturbed while nursing and the baby should not be allowed to play or go to sleep.

The baby should be held up after nursing to allow him to expel gas.

If the mother has a cold she should wear a mask of flannelette or handkerchief folded over her mouth and nose when she is nursing the baby.

The nursing mother should take 1½ pints or 1 quart of milk every day, some fruit, some vegetables, one cereal, some meat, fish or eggs every day. She should also drink a fairly large amount of water.

The nursing mother should sleep 8 hours every night, and have a sleep or rest every afternoon.

GIVING THE BABY A DRINK OF WATER

LESSON 6.

Every morning two feeding bottles, two corks or bottle stoppers, two or three nipples, two glass jars and one cover should be placed in a basin of water and boiled for 5 minutes.

One of the bottles should be filled with boiled water and the cork or stopper put on it.

The nipples are placed in one jar and the cover put on it.

The other jar is left empty and uncovered.

All of these articles should be placed on a tray.

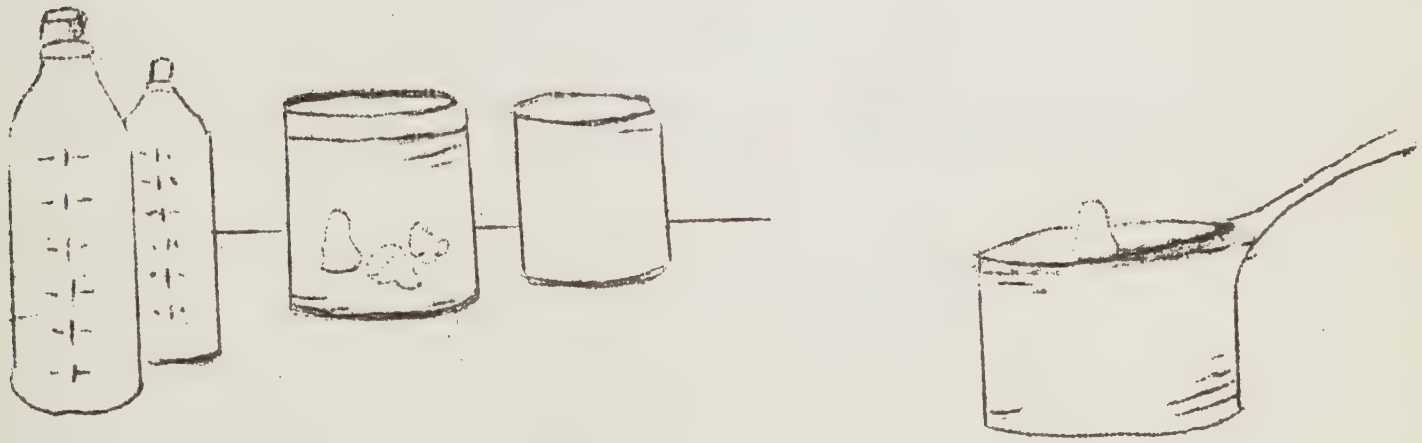
The baby may be given water any time except within one-half hour of feeding time.

To give a drink of water to the baby, pour the amount he will probably drink into the empty bottle, from the bottle of boiled water.

Put a nipple from the covered jar on the bottle.

Warm the water by placing the bottle in a pan of fairly hot water and leave it until it is warm.

When the baby has had all he wants take the nipple off the bottle and place it in the uncovered jar, empty the remaining water and put the cork or stopper back on the bottle.



ORANGE JUICE, TOMATO JUICE AND COD LIVER OIL

LESSON 7.

Orange Juice:

The mother should begin giving orange juice to baby when he is one month old.

To give Orange juice for the first time, the juice of a sweet orange is squeezed (strained) and a tablespoonful is added to about a tablespoonful of the baby's drinking water.

Each day the amount of orange juice in the drinking water is increased until 4 or 6 tablespoons are being given once daily in an equal amount of water when baby is 6 months old.

Tomato Juice:

Tomato juice may be given instead of orange juice increased to double the amount of orange juice.

To prepare tomato juice, empty a small can of canned tomatoes into a sieve, push the pulp and juice through the fine sieve into a jar, cover tightly and place in a cool place. This loses much of its value after 48 hours.

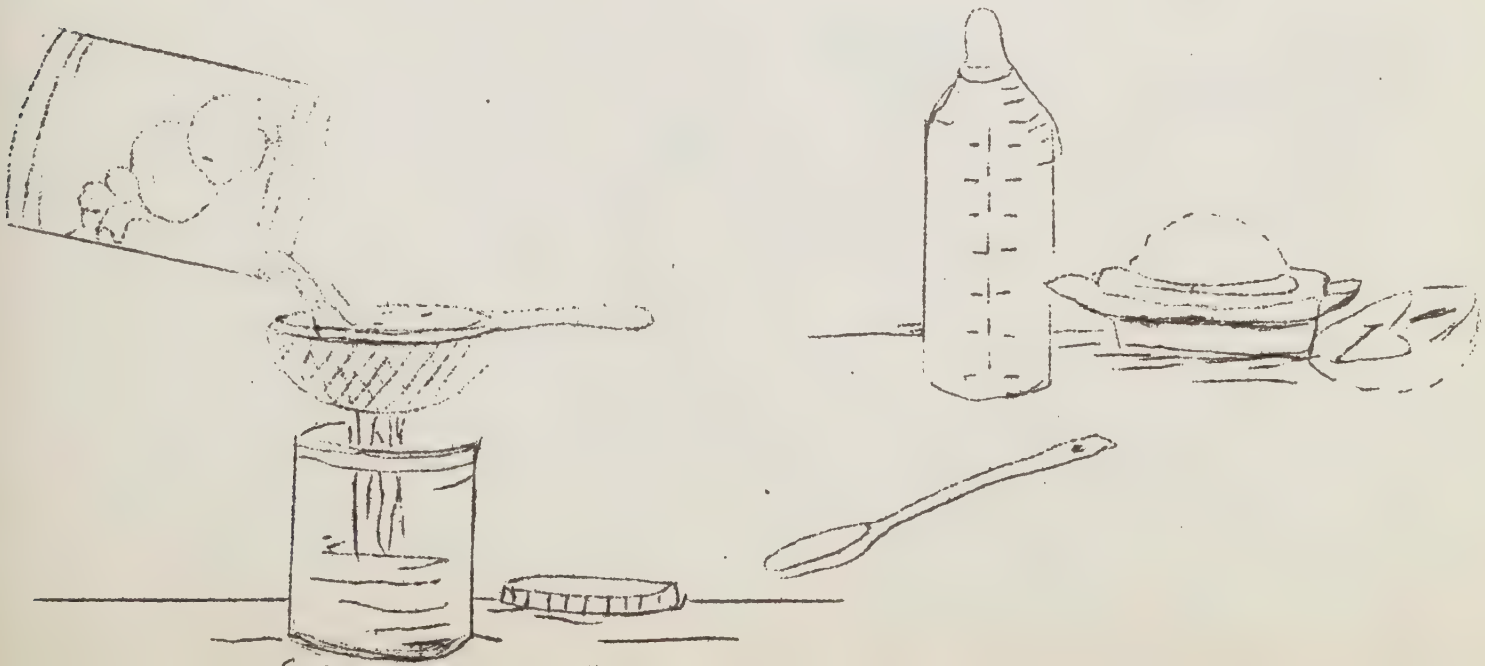
To give for the first time, add a few drops of tomato juice to about an ounce of the baby's drinking water.

Each day the amount of tomato juice is increased until 8 or 16 tablespoons are being given in an equal amount of water once a day.

Cod Liver Oil:

The mother should begin giving cod liver oil when the baby is one month old.

To give cod liver oil for the first time, ten drops are placed on a teaspoon and put into the baby's mouth. Give twice a day.



BOTTLE FEEDINGS

LESSON 8.

The baby's feeding should be ordered by a doctor.

When a bottle feeding is ordered by a doctor, the mother should buy the following, unless she already has the articles.

As many bottles as there are feedings in 24 hours - usually 5 or 6.

A nipple for each bottle.
Absorbent cotton to use as a stopper for each bottle.
Two class jars, one with a cover for clean nipples; one without a cover, for used nipples.
A bottle brush.
A double boiler.
A pitcher.
A measuring cup.
A long handled spoon.
A small wire strainer.
A funnel.
A tablespoon.
A preserving kettle with a lid, in which to boil the bottles, jars, nipples, etc.

Before making the feeding, the bottles, nipples, jars, corks, measuring cup and funnel should be placed in water and boiled 5 minutes.

In making the feeding, the doctor's orders should be read carefully and amounts measured accurately.

When the feeding has boiled the proper time, it should be strained and poured while hot into the hot bottles, using the measuring cup and funnel.

The bottles should be corked with absorbent cotton as soon as they are filled, placed in a cool place until almost cold and then placed in the refrigerator.

CEREALS AND VEGETABLES

LESSON 9.

Cereals:

Cereals are given to some babies as young as 5 months, according to the doctor's directions.

A very small amount should be given when cereal is given for the first time.

The first cereal is usually given before the 10 o'clock morning feeding.

When two cereal feedings a day are given, they are given before the 10 o'clock feeding and before the 6 o'clock evening feeding.

Vegetables:

Vegetable soup may be given to some babies as early as the 7th month. Vegetable pulp may be given at 8 months.

When vegetables are given for the first time, a very small amount should be given. The vegetables should be cooked and pushed through a sieve into some of the water in which they were cooked.

Vegetables are usually given before the 2 o'clock afternoon feeding. When a child is about a year old, vegetables are given as part of the dinner, usually at about 12 o'clock.

SUNSHINE AND FRESH AIR

LESSON 10.

For fresh air the baby should sleep outside or if inside in a room with the window open.

The baby should have a sunbath every day from the first of June to the end of August.

The first time the baby is outside for a sunbath his bed or carriage should be placed so that the sun shines on his face only but not into his eyes. All the rest of his body should be covered.

The sun should shine directly on his face for not more then five or ten minutes. It should not shine into his eyes.

The next day the sun should shine on the baby's face and hands for about 5 minutes. The day after on his arms and legs as well for about 5 minutes; tho next day he can have ten minutes with arms and legs in the sun.

Every day the sun should shine on a little bit more of the baby's body until finally his whole body is exposed. He should never be left in the sun for more than one-half hour if the sun is very strong or one hour if the sun is not so strong.

The mother should stay with the baby for all of the sunbath to see that he does not get sun-burned. If the mother begins to feel uncomfortable because of too much sun, she should take the baby in.

Protect the baby's head if it is very hot.

Protect the baby from wind in cold months.

Do not give a sun bath just before or after a meal or after a bath.

In July and August give sun bath before 11 o'clock or after 3 o'clock.

"KEEP WELL" RULES

LESSON 11

1. Keep flies off the baby and everything belonging to him.
2. Consult a doctor immediately if baby has diarrhoea.
3. A baby should not be taken to a house where there is sickness.
4. No one who is sick should come near the baby.
5. Be sure any spoon or cup that has been used by another person has been washed thoroughly before using it for the baby.
6. Babies should not be kissed on the mouth.
7. The heat of baby's food should not be tested by putting the nipple in your own mouth.
8. Pacifiers, comforts or sucking an empty bottle are not good for a baby.
9. A baby should not be played with immediately after its feeding.
10. Babies should not be given tea, coffee, candy, cakes or tastes from the table.
11. Babies should not be taken out at night.
12. Babies should not be encouraged to walk or stand until they are ready for it.

CLOTHES FOR THE BABY

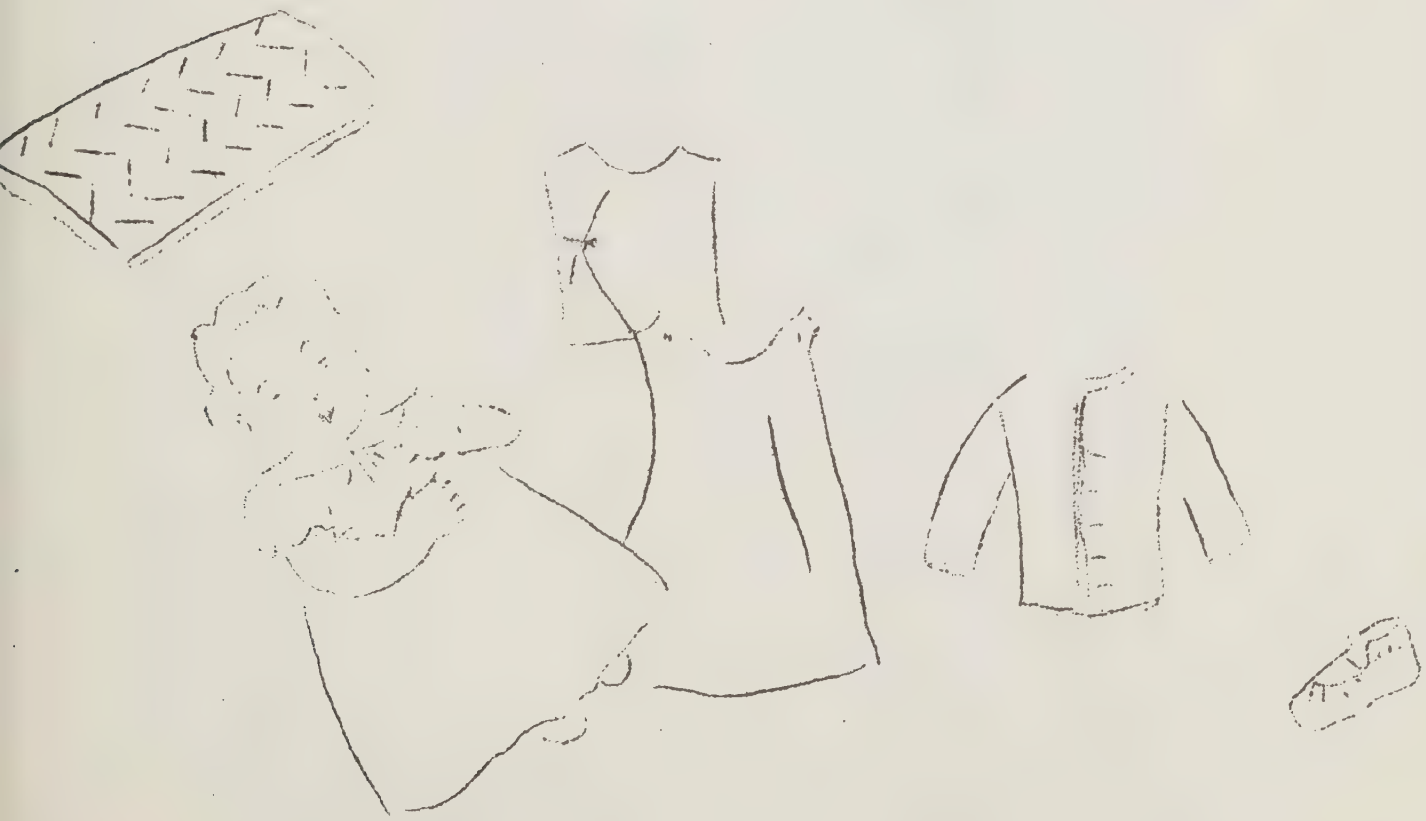
LESSON 12.

All the clothes baby will need for the first few months are:

3 flannel bands (27" long and 6" wide) pinked, not hemmed - used only until the navel is healed.
3 shirts, size 2, woollen mixture.
3 sleeveless vests or bands, size 2, woollen mixture.
3 pairs bootees that cover the knee or stockings (6 mos. size).
3 dozen diapers, 27" square, of diaper cloth.
3 petticoats, flannelette, 24" long.
3 dresses, flannelette, 24" long.
3 nightdresses, flannelette, 27" long.
3 squares (1 yard square) of flannelette, medium to heavy weight, to use as a shawl.
4 pads of quilted cotton (11" x 16").
2 pieces (11" x 16") of rubber sheeting or oilcloth.

N.B. Petticoats may be omitted as very young babies do not wear petticoats except in the winter when the house is cold and they are needed for extra warmth.

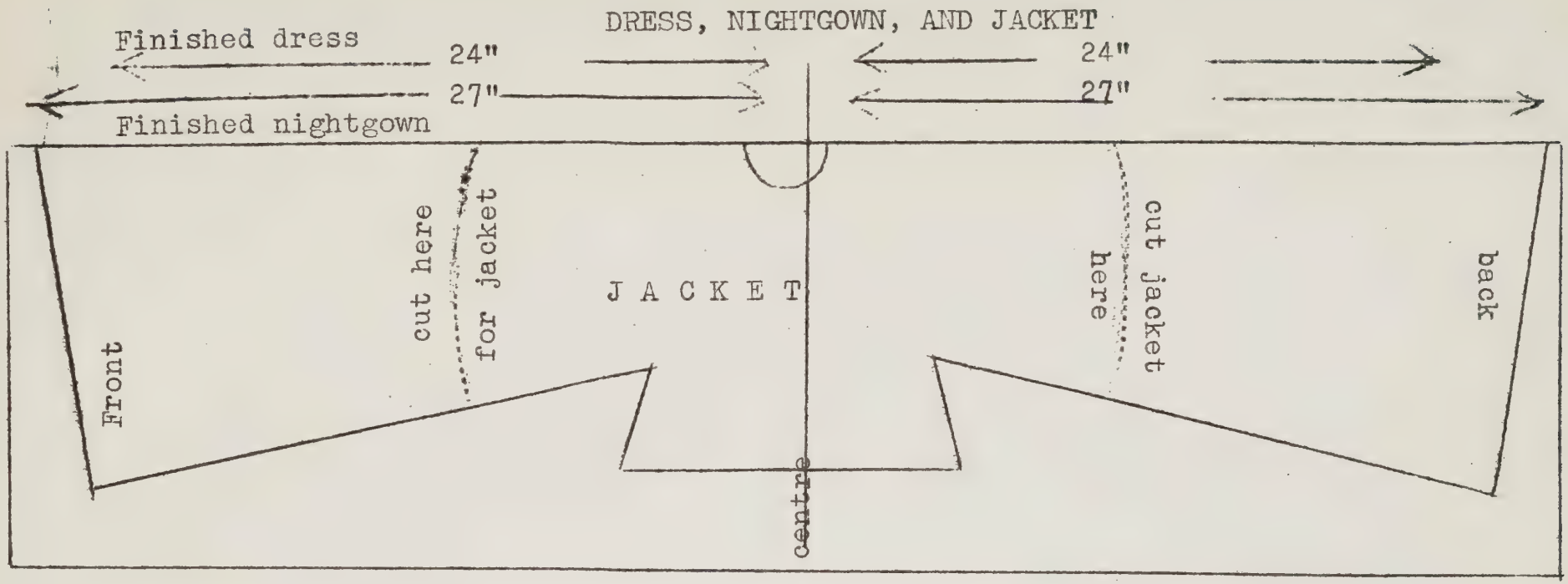
Woollies - Jacket (knitted or crocheted) is preferred by most mothers for the very small baby.
A pullover sweater is very satisfactory, however, after second month. Pullover pants may be knitted or crocheted. They are used for protection or extra warmth, and are much better for baby than rubber pants. If baby's training is begun early, the number of soiled and wet diapers will be greatly reduced.



GUIDE FOR CUTTING BABY GARMENT PATTERNS

FOR

DRESS, NIGHTGOWN, AND JACKET



To use pattern for dress or nightgown, double the material to the width of the pattern and place straight edge at fold. Cut back along centre fold and finish with hems. The dress should be 24" long when finished and the nightgown 27" long. For a jacket pattern use the lined portion. Finish jacket edge with binding or blanket stitch. Note neckline. Note the neckline is higher at the back than the front. Do not make neck too large and open.

Patterns and directions for knitted garments may be found in "Hand-Knit Woollies for Tiny Tots" (Corticelli, #KP43), or similar may be found in "A Simplified Knitting Guide for Home and School" by Hood and Polson, Dent. 50¢.

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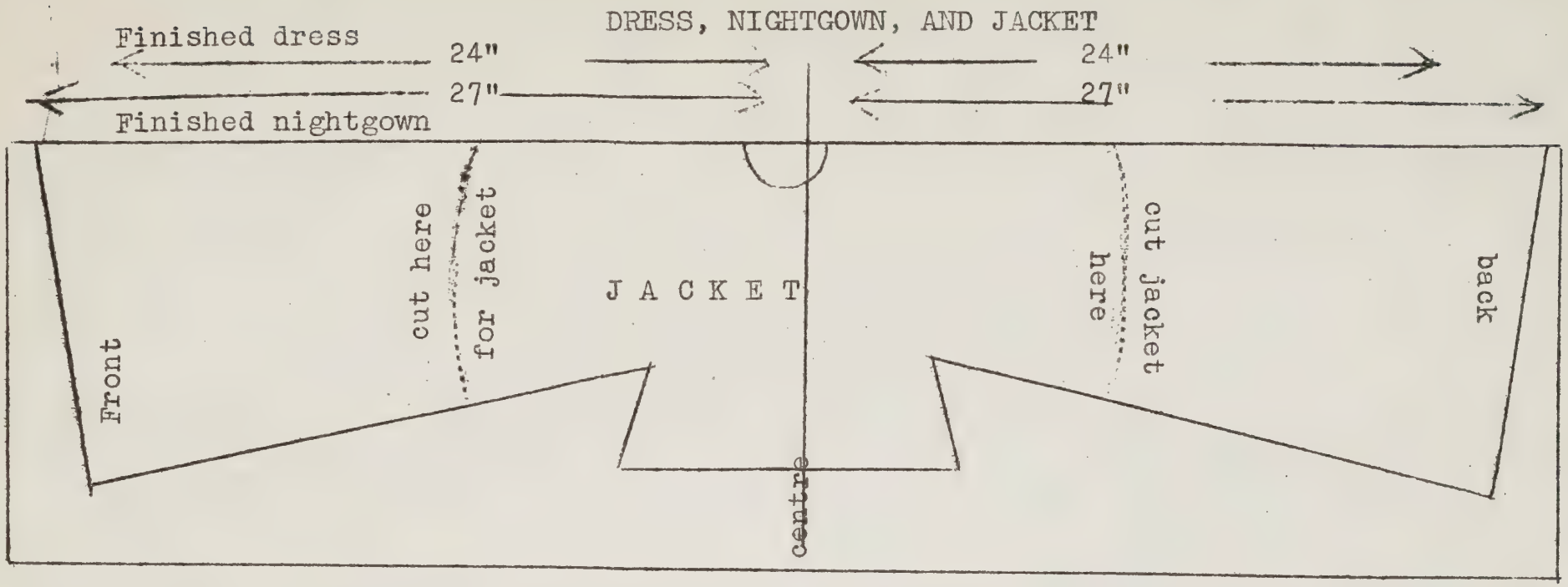

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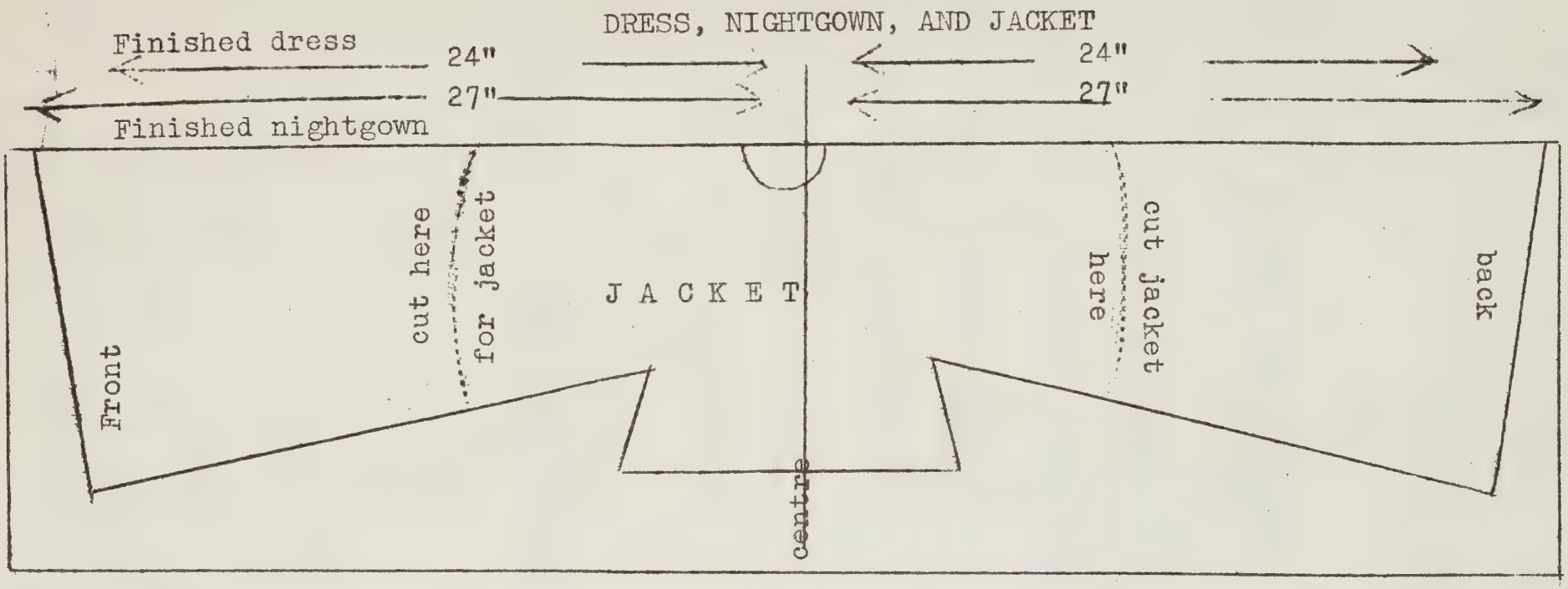

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REFERENCE BOOKS

For the Girls

The Baby - issued free, Department of Health, Parliament Buildings, Toronto, Ontario.

Understanding Your Baby - by Schultz and Smart, $1.05 American News Co., 474 Wellington St. W., Toronto, Ontario.

For the Mother

Books about the Care of the Baby:

Mother and Baby Care in Pictures - Louise Zabriskie.

The Letter Series - published by the Canadian Welfare Council, 245 Cooper St., Ottawa, Ontario.

Our Babies - Dr. Herman N. Bundesen - published by Prudential Insurance Co., of America, Newark, New Jersey.

Infant Care - publication #8 - U.S. Department of Labour, Washington, D. C.

The Normal Child - Dr. Alan Brown - published by S. D. Goodchild & Co., Toronto, Ontario.

x The Canadian Mother and Child - published by authority of Minister of Pensions and National Health, Ottawa,, Ontario.

Being Born - Frances Bruce Strain.

x This book is intended for mothers in rural areas. The teacher should not leave this or other books intended for mothers on the open shelves of the library.

amphlets on the Education of the Academically Handicapped No. 1

repared by C. E. Stothers, Inspector of Auxiliary Classes,
Department of Education, Toronto.

EMPLOYMENT OF ONE THOUSAND GRADUATES OF SPECIAL CLASSES

(Initial Report)

epartment of Education, Toronto, October 1943 - 700

EMPLOYMENT OF GRADUATES OF SPECIAL CLASSES

A summary of data collected on graduates of
Opportunity, Handicraft, Sight Saving,
and Orthopaedic Classes.

Purpose

In the organization and administration of Special Classes, there is always the negative reason for their creation that the slow-learning pupils are better segregated since their presence retards the other pupils in the class. This is due to the sound educational principle that pupils learn at their individual rates.

In Special Classes remedial teaching is carried on after finding the pupil's achievement levels in Reading, Arithmetic, Vocabulary, Ability to see similarities and Ability to follow a plan. Instruction is carried on at the pupil's individual rate subject by subject. Handwork is given because people and pupils can handle actual first-hand tasks better than abstractions and problems involving vicarious experience.

The data are presented to explore the positive evidence for the provision for individual methods and teaching in special classes. Some of the questions which recur regularly are:

(1) With what equipment did the graduates of special classes face their economic, business and national duties?

(2) How much did their school training contribute to their economic success or failure?

(3) What are the graduates accomplishing in industrial, commercial, national and social service?

(4) In what ways should the training in special classes be improved?

(5) What information is needed if we are to answer the above questions and others like them?

Method of Collecting the Data

A form was prepared and sent to each special class teacher with the request that he or she fill in as much data as possible on such graduates as they could locate conveniently. The following information was given wholly or in part for each 1009 graduates:

(1) Name
(2) Date of Birth
(3) Number of months enrolled in a Special Class
(4) Intelligence Quotient
(5) Grade in Reading on graduation
(6) Grade in Arithmetic on graduation
(7) Employment on and after graduation.

Source of data

Reports were received from Brantford, East York, Fort Frances, Fort William, Galt, Guelph, Hamilton (R. Land and F. W. MacBeth Schools), Kingston, London (Alexander & Empress), Napanee, North York, North Bay, Orillia, Owen Sound, Ottawa (First Ave. School), Peterborough, Port Arthur, St. Thomas, Timmins, Toronto (Bolton Ave., Edith L. Groves, Wellesley, Indian Rd. Crescent, Brock Ave. St. Mary's Schools), Windsor and Woodstock.

Since no regular plan or forms exist for the collection of data on employment the teachers of the classes mentioned above deserve special commendation for collecting and furnishing information. In many cases complete answers could not be furnished and this accounts for the differences in the numbers for each table.

Treatment of the Data

A card was made out for each pupil reported in order to file the material according to occupations. Statistical procedures were used to produce Tables I, II, III, IV, V.

Table VI shows the occupations of the Graduates of the Wellesley Orthopaedic School.

Table VII is the List of Occupations of Graduates of Opportunity, Sight Saving and Handicraft Classes.

Table I

Intelligence Quotients of 759 pupils graduated from Opportunity & Handicraft Classes.

	Boys	Girls	Total
111 - 115	0	1	1
106 - 110	3	0	3
101 - 105	4	1	5
96 - 100	11	4	15
91 - 95	13	4	17
86 - 90	25	16	41
81 - 85	51	33	84
76 - 80	92	78	170
71 - 75	115	75	190
66 - 70	70	44	114
61 - 65	43	32	75
56 - 60	15	10	25
51 - 55	5	6	11
46 - 50	7	1	8
	454	305	759
Median	74.7	74.8	74.7

Graph I

Distribution of Intelligence Quotients - (One figure represents one percent of the total in Table I)

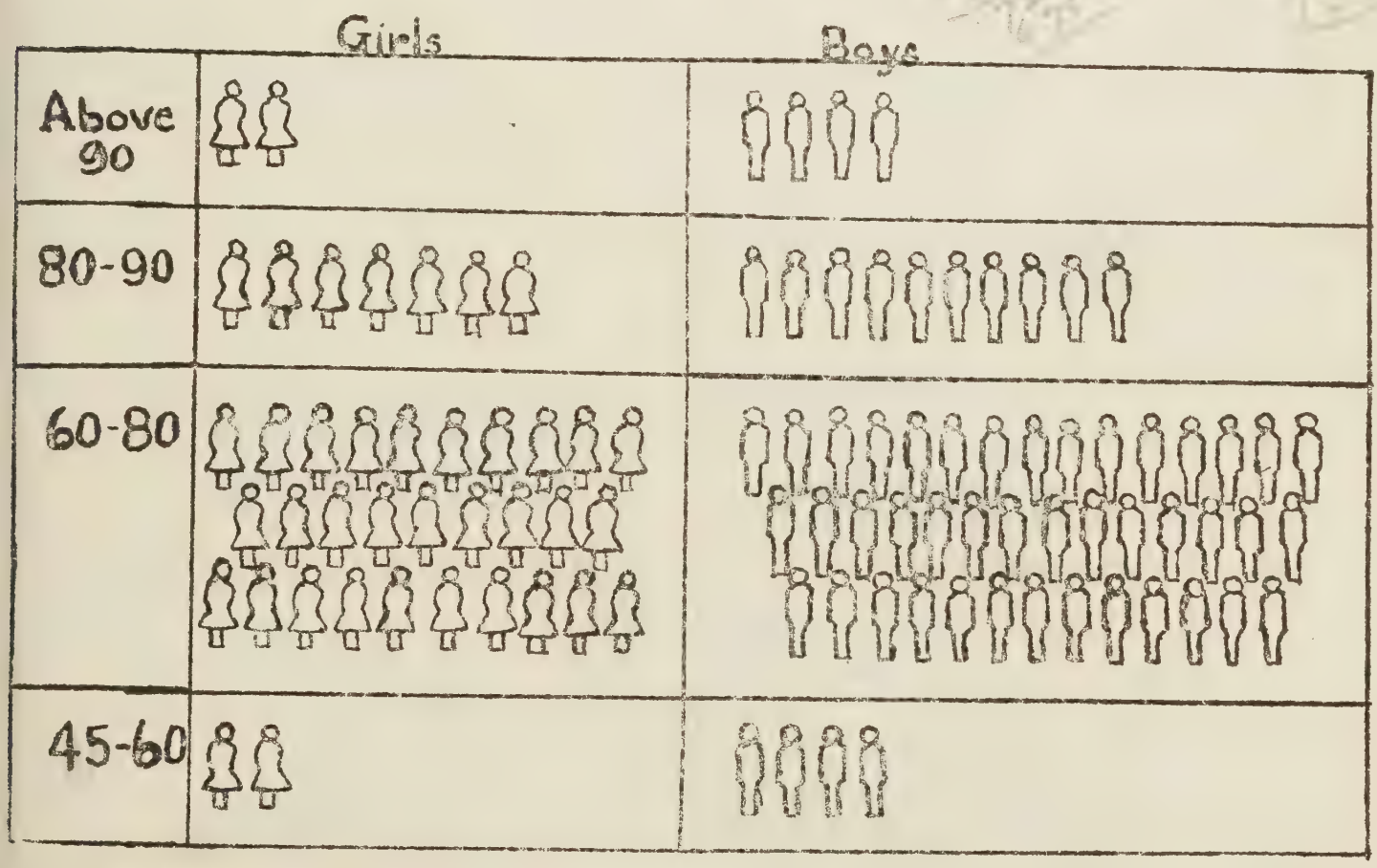


Table II

Ages of 775 graduates on entrance to Opportunity & Handicraft Classes.

	Boys	Girls	Total
16.0 - 16.3	10	4	14
15.8 - 15.11	3	4	7
15.4 - 15.7	9	20	29
15.0 - 15.3	51	21	72
14.8 - 14.11	18	7	25
14.4 - 14.7	7	22	29
14.0 - 14.3	58	22	80
13.8 - 13.11	41	21	62
13.4 - 13.7	33	33	66
13.0 - 13.3	81	80	161
12.8 - 12.11	15	25	40
12.4 - 12.7	12	8	20
12.0 - 12.3	24	9	33
Below 12	95	42	137
	457	318	775
Median	13.4	13.4	13.4

Graph II

Distribution of pupils according to age at entrance to a special class
(One figure represents one per cent of the total in Table II.)

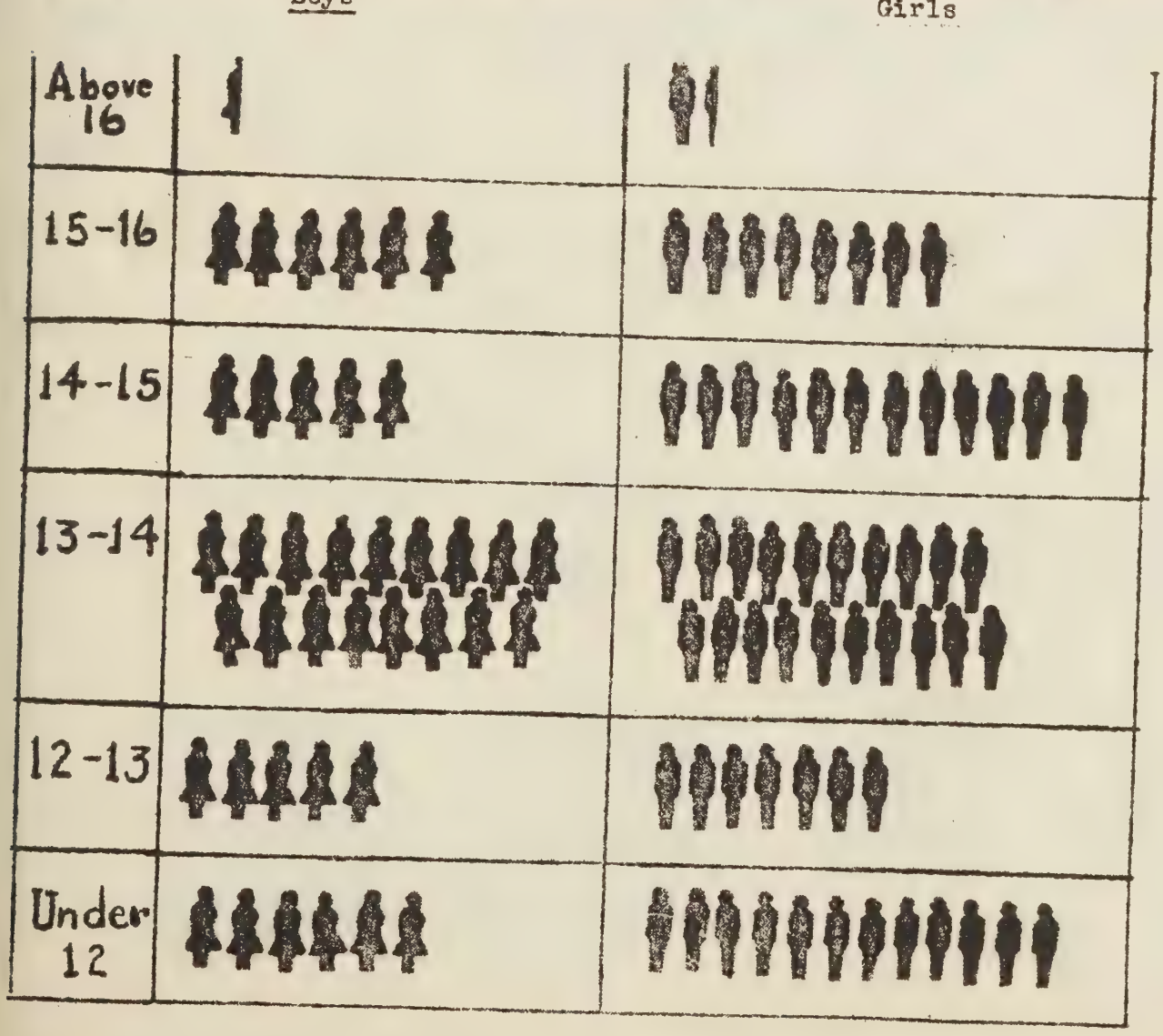


Table III

Months in an Opportunity or Handicraft Class spent by 814 regularly admitted pupils.

	Boys	Girls	Total
96 - 100	2	0	2
91 - 95	0	0	0
86 - 90	3	1	4
81 - 85	3	0	3
76 - 80	4	2	6
71 - 75	1	2	3
66 - 70	2	1	3
61 - 65	5	1	6
56 - 60	9	7	16
51 - 55	3	4	7
46 - 50	23	6	29
41 - 45	5	1	6
36 - 40	33	21	54
31 - 35	12	20	32
26 - 30	45	86	131
21 - 25	32	36	68
16 - 20	85	55	140
11 - 15	71	20	91
6 - 10	115	34	149
1 - 5	47	17	64
	500	314	814
Median	17	25	19

Graph III

Distribution of pupils according to length of instruction in a special class

(One figure represents one percent of total in Table III)

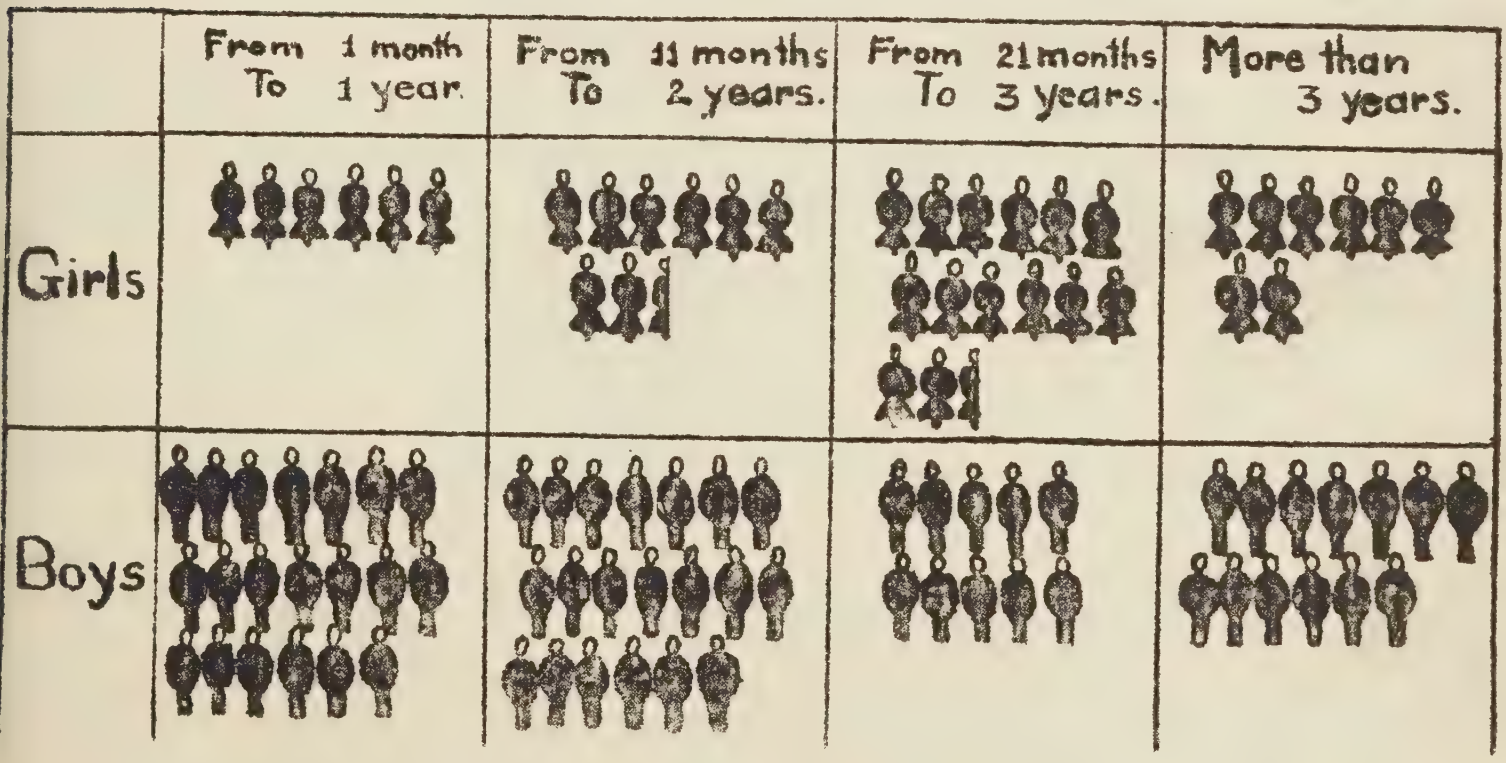


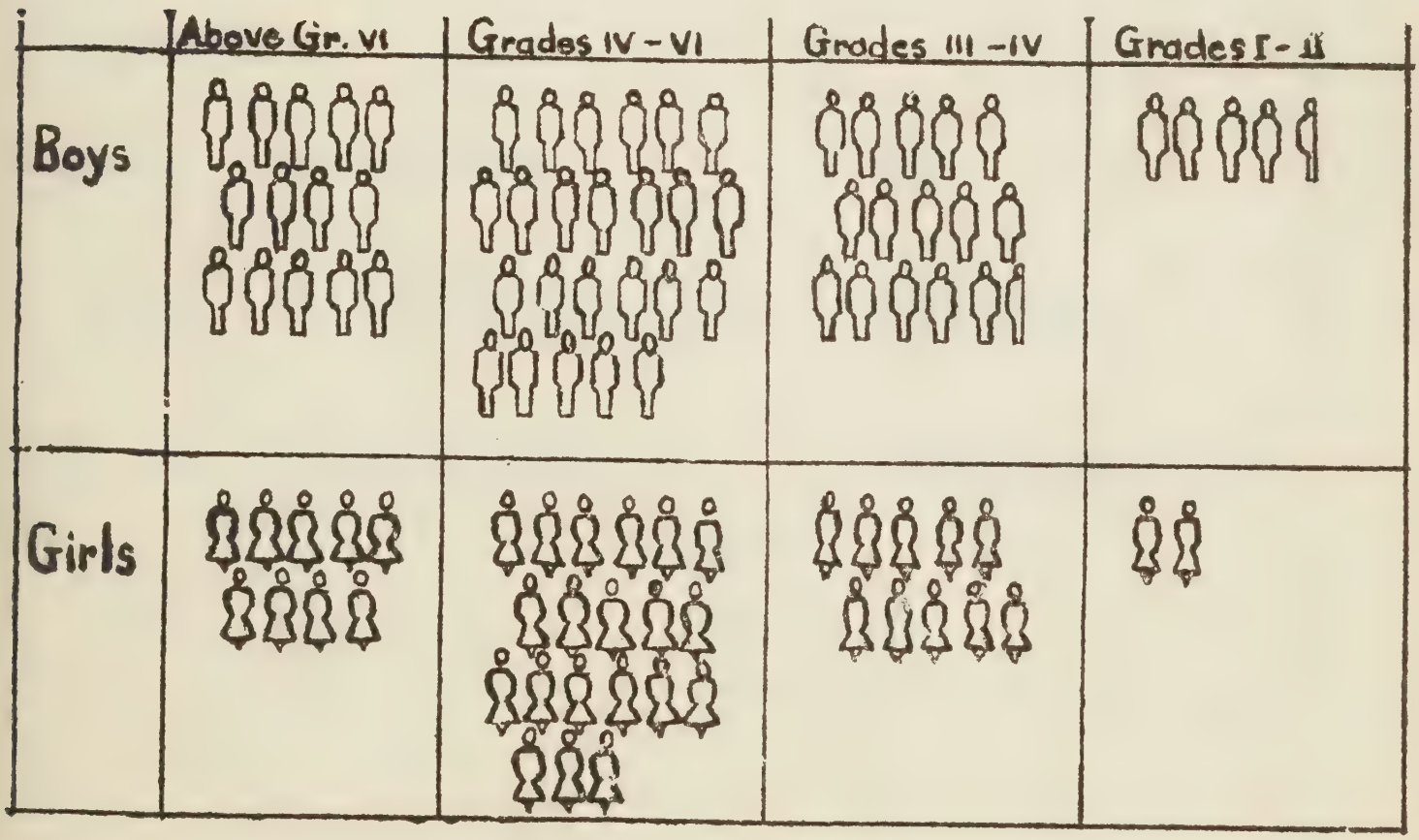
Table IV

Achievement in Reading on Graduation of 728 pupils in Opportunity & Handicraft Classes.

	Boys	Girls	Total
X.0 - X.10	1	2	3
IX.0 - IX.10	7	12	19
VIII.0 - VIII.10	68	16	84
VII.0 - VII.10	28	31	59
VI.0 - VI.10	100	76	176
V.0 - V.10	82	71	153
IV.0 - IV.10	63	61	124
III.0 - III.10	48	15	63
II.0 - II.10	18	11	29
I.0 - I.10	13	5	18
	428	300	728
Median	V.9	V.8	V.8

Graph IV

Distribution of Reading Achievement on Graduation (one figure represents one per cent of total in Table IV.)



Note - For Boys Grades IV - VI there should be 25 symbols instead of 24.

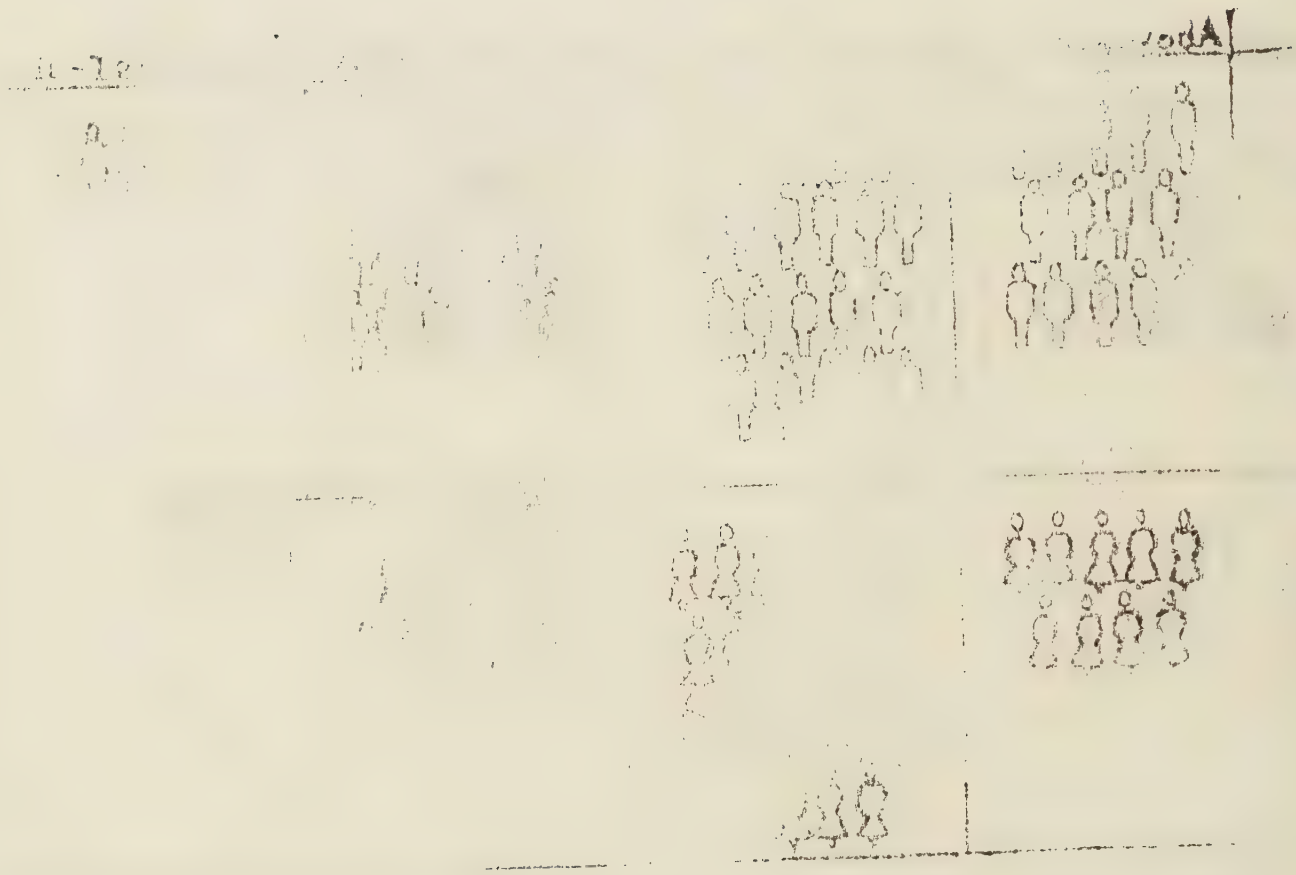


Table V

Achievement in Arithmetic on Graduation of 726 pupils in Opportunity or Handicraft Classes

	Boys	Girls	Total
X.0 - X.10	0	1	1
IX.0 - IX.10	5	6	11
VIII.0 - VIII.10	65	6	71
VII.0 - VII.10	30	16	46
VI.0 - VI.10	91	45	136
V.0 - V.10	85	63	148
IV.0 - IV.10	89	102	191
III.0 - III.10	38	47	85
II.0 - II.10	10	12	22
I.0 - I.10	9	6	15
	422	304	726
Median	V.8	IV.8	V.3

Graph V

Distribution of Arithmetic Achievement on Graduation (One figure represents one per cent of the total in Table V.)

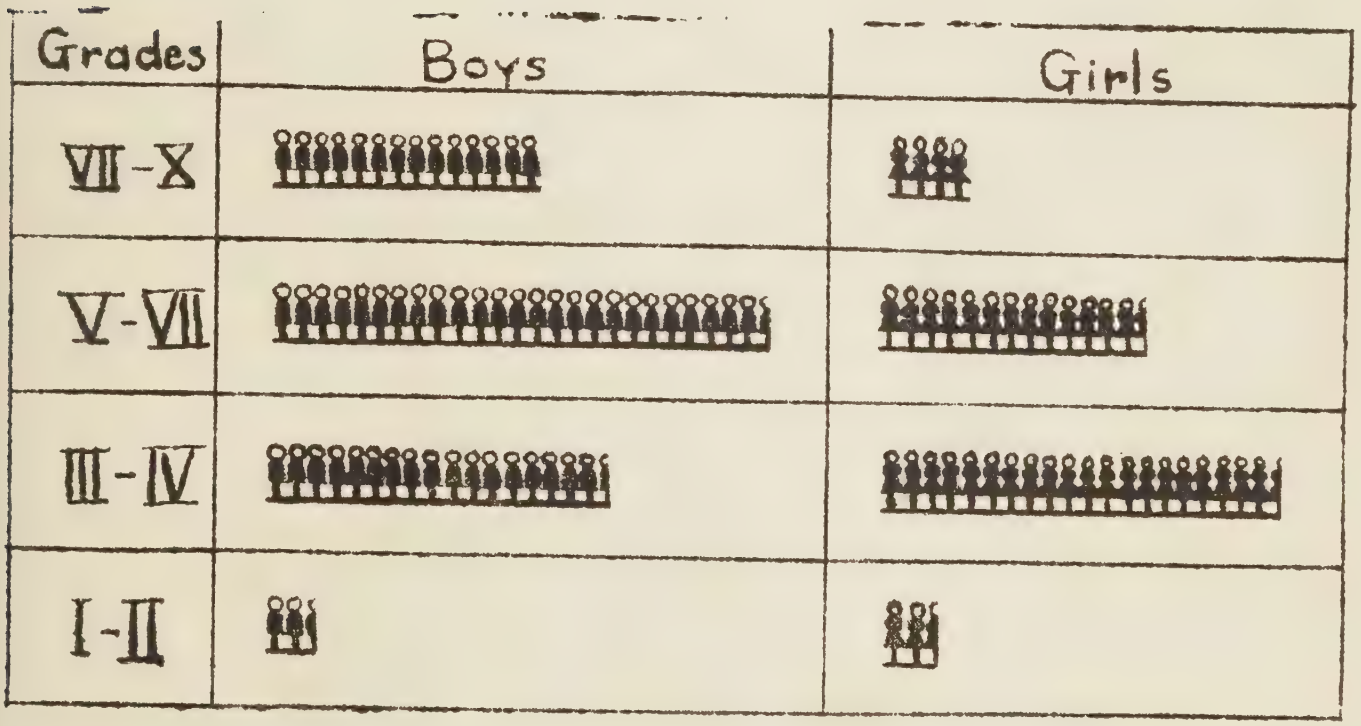


Table VI

Employment of Graduates of the Wellesley Orthopaedic School, Toronto.

Disease	Employment of Boys	Employment of Girls
Poliomyelitis	Auto Repair - 1	Clerk - 1
	Bookkeeper - 3	Dressmaker - 1
	Chemist - 1	Munitions Inspector - 1
	Draughtsman - 1	Sorter - 1
	Machinist - 3	Secretary - 1
	Munitions - 2	Time-keeper - 1
	Office Clerk - 2	Typing - 6
	Stock-keeper - 1	Moved - 3
	Teacher - 1	
	Watch Repairing - 1	
Cerebral Palsy	Chicken Farm - 1	Cashier - 1
	Telephone Clerk - 1	Dressmaking - 1
	At home - 1	Journalist - 1
		At home - 4
Spinal bifida	Office work - 1	Typing - 2
Hydrocephalic	Rug making - 1	
	Radio Repair - 1	
Dystrophy	At home - 1	Pattern making - 1
Miscellaneous		Factory - 1
		Office clerk - 1
		At home - 1
	23	28

Table VII

List of Occupations of Graduates of Opportunity, Sight Saving & Handicraft Classes.

A. War Service	Boys	Girls	Total
Army	143	0	143
Navy	7	0	7
Air Force	2	1	3
Merchant Marine	3	0	3
	155	1	156
B. Industrial and Factory Work			
Agriculture	26	0	26
Automobile	20	0	20
Boxes	5	0	5
Bread	1	0	1
Brewing & Beverages	4	0	4
Bleaching Powder	1	0	1
Brushes	1	0	1
Buttons	2	0	2
Candy	0	12	12
Canning	2	0	2
Cereals	1	0	1
Chemicals	2	0	2
Christmas Cards	0	2	2
Clothing	0	5	5
Concrete	1	0	1
Cosmetics	0	2	2
	66	21	87

B. (cont'd)	Boys	Girls	Total
Electrical	4	0	4
Furniture	6	0	6
Food	8	16	24
Glass	4	0	4
Groceries	0	2	2
Gum	0	4	4
Hats	5	0	5
Leather	0	2	2
Lumber	2	0	2
Mattress	0	2	2
Metals	72	0	72
Munitions	0	25	25
Optical	0	2	2
Paper	7	3	10
Paper Products	0	10	10
Pottery	2	0	2
Rubber	1	0	1
Sewing (Power Operating)	2	29	31
Shoes	6	4	10
Soap	0	2	2
Spinning	3	0	3
Tea Packing	0	3	3
Textiles	28	10	38
Tobacco	2	0	2
Typewriters	1	0	1
Unclassified	73	31	94
Wire	6	0	6
Wood Products	13	0	13
	311	166	477

C. Service and Trades	Boys	Girls	Total
Baker's helper	10	0	10
Bell Boy	1	0	1
Bowling Alley	1	0	1
Bricklaying	1	0	1
Butcher	6	0	6
Cashier (theatre)	0	1	1
Cartage	1	0	1
Chambermaid	0	1	1
Chauffer	1	0	1
Clerks (store and office)	21	15	36
Contracting	2	0	2
Cook	0	1	1
Delivery (milk)	2	0	2
Delivery Boy	24	0	24
Doorman	1	0	1
Dry Cleaning	8	0	8
Electrician	1	0	1
Elevator Operator	0	1	1
Garage Worker	8	0	8
Hairdresser	0	3	3
Housemaid	0	11	11
Kitchen help	0	3	3
Laundry work	1	8	9
Machine Shop helper	3	0	3
Machinist	2	0	2
Maid (hospital)	0	4	4
Messenger (telegraph)	7	1	8
Nursemaid	0	2	2
	101	51	152

C. (cont'd)

	Boys	Girls	Total
Odd jobs	3	0	3
Office Girls	0	3	3
Page Boy	1	0	1
Painter's helper	2	0	2
Parcelling	0	3	3
Photo Studio helper	1	0	1
Plumbing & Tinsmithing	2	0	2
Railroad Labour	3	0	3
Restaurant Worker	5	0	5
Repair (washing machines)	2	0	2
Sailor	1	0	1
Seamstress	0	8	8
Shoe Shine	1	0	1
Telephone clerk	0	1	1
Tool & die maker (apprentice)	2	0	2
Tailor	1	0	1
Truck Driver	11	0	11
Typist	0	2	2
Usher	2	1	3
Unclassified	2	4	6
Waitress	0	8	8
	140	81	221

D. At Home	Boys	Girls	Total
Home Help	11	22	33
Housekeeping	0	23	23
Housewife	0	17	17
School	4	4	8
E. Institutional & Hospital Care			
Reform Schools	9	0	9
Hospitals	4	10	14

SUMMARY OF EMPLOYMENT OF GRADUATES

	Boys	Percent	Girls	Percent	Total	Percent
War Services	155	24.45	1	.30	156	16.28
Industrial & Factory Employment	311	49.05	166	51.24	477	49.79
Trades & Services	140	22.09	81	25.00	221	23.07
At Home	15	2.36	66	20.37	81	8.46
Institutions & Hospitals	13	2.05	10	3.09	23	2.40
Total	634	100.00	324	100.00	958	100.00

Samples from Collected Data

Case	Birthday	Age on entering class	Months in Class	I.Q.	Graduation Grade Reading	Graduation Grade Arithmetic	Subsequent Employment
110F	7.3.25	13.6	26	81	VIII	VII	R.C.A.F. (W.D.)
131F	16.5.25	13	30	80	VI	V	(1) Waitress (2) Maid in hospital (3) Nurse in training.
183F	18.7.13	10.10	52	64	II	II	Knitting Mill 9 years. Married with 2 children. One a mongoloid type.
207F	22.7.25	13.0	22	80	VI	VI	(1) Elevator girl. (2) Book-binding.
254F	24.11.26	12.9	33	81	VI	IV	(1) Proof Reader (2) Messenger & filing clerk in a large store.
286F	18.7.13	10.10	52	64	II	II	(1) Housemaid in same home 8 years (2) Knitting Mill 3 years (Twin to 183F)
300F	8.5.26	14.4	21	74	V	IV	Hand-sewing on surgical gowns
305F	1.2.23	9	40	68	III	I	Counts eggs in Hatchery
320F	3.5.25	12	40	75	V	IV	(1) Messenger Girl (2) Office Girl.
311F	11.12 .16	12	20	68	IV	III	Married with 2 children. Widow with 3 illegitimate children.

Samples from Collected Data (cont'd)

Case	Birthday	Age on entering Class	Months in Class	I.Q.	Graduation Grade Reading	Graduation Grade Arithmetic	Subsequent employment
37M	6.12.25	8.8	68	65	III	IV	(1) Furniture Factory (2) Sailing (3) Furniture Factory - a steady worker.
89M	20.4.22	14	15	57	V	V	Woollen Factory - Job held open till he returned from enlistment he was so satisfactory.
96M	31.12.27	14	12	53	II	III	Winding bobbins
121M	21.12.25	?	?	?	IV	III	(1) Textiles (2) Machine Shop $40. weekly.
252M	1.5.16	9	50	65	III	II	(1) Mimico School (2) Ontario Hospital (3) Reformatory (4) Refused in army because of deafness
253M	1.5.16	9	50	69	III	II	(1) Mimico School 1931 (2) Ont Hospital 1932 (3) Reformatory 1939 (4) Army 1942 (Twin to 252M)
427M	18.4.24	11.0	30	85	IX	IX	Merchant Marine - lost life on convoy.
437M	5.8.25	16	9	83	VIII	VIII	Apprentice Tool & Die Maker
480M	26.1.20	10	30	72	II	IV	Army - killed in Dieppe Raid.
501M	?	?	30	70	?	?	(1) Butcher boy $7. weekly (2) Aeroplane factory $19. weekly (3) War Emergency Classes (4) Aeroplane factory $22. (5) Steel tubing $22. (6) Munitions $25.

Observations

1. Age of pupils on admission to Special Classes.

Table II shows that the median age on admission to Special Classes is 13 years 4 months. Since the regulations provide for admission to Handicraft Classes at age 13 and the greater portion of the data is from Handicraft Classes and Special Industrial Schools, the statistics reflect this condition fairly accurately.

Over one-third of these pupils were admitted at ages 14, 15 or 16.

2. Academic Abilities

Table I shows that the typical entrant to an auxiliary class has the expectation of reaching Grade VI before attaining the legal school-leaving age. The median intelligence quotient of 74.7 or 75 means that the pupil should at 16 years of age equal in his academic success the performance of the average 12 year old.

The table also shows that nearly half the pupils are in the "slow-learning","average"and "superior" categories and that a large percentage could pass the entrance examination if their handicaps could be overcome.

3. Period of Instruction

Table III shows that the typical or median boy stays 17 months and the girls 25 months in a special class and that most pupils stay 19 months or almost two school years.

The data showed that pupils varied from 1 - 90 months in the length of time they were given instruction suited to their needs.

The teachers consider that three years or 30 months is the optimum period for giving the pupil the greatest benefits. The girls seem to approach more nearly to this standard than the boys.

The time units in this investigation are the month and the school year of 10 months.

4. Achievement in Reading and Arithmetic

The median achievement grade in reading is the eighth month in Grade V. This is very close to the completion of Grade V and admission to Grade VI. Some non-readers remain at the completion of formal schooling as is shown by the number in Grades I and II in Table IV. The graduates range in ability from low Grade I to high Grade X.

Arithmetic shows a difference in the grade achievement of a whole year in the performance of boys aand girls. This may be due to sex difference. The record in arithmetic is based on teacher judgment of most pupils. For some of the boys and girls achievement scores were submitted in terms of grades on achievement tests. In Reading these scores may approach more nearly the standards of Ontario grades. In Arithmetic the age-scores on United States tests may raise the grade when translated through the Age-Grade Table into Ontario grades.

5. Employment of Graduates

The typical graduate of a special class has not a high degree of academic ability. He has spent almost two years in a class where he is given regular periods of handwork and where he may progress at his individual rates in each of the academic subjects.

Both the boy and the girl graduate have reached a high Grade V level in reading. The boy has reached the same level in Arithmetic but the girl is a year behind.

With this background and equipment he or she must compete with persons of a similar age who have the advantage of higher academic abilities. (Since we are not presenting data on physical, emotional, economic and social handicaps which undoubtedly exist, other factors cannot be considered here.)

The record shows that 95% of the boys and 76% of the girls obtained employment outside the home and that 2.4% required hospital or institutional care. The 958 graduates were distributed into over 100 classifications and if the information had been more complete the number of different services listed would have been much greater.

It appears to be significant that approximately 50% of the graduates are employed in factories; that nearly 25% of the boys are now in direct war services; and that 23% of the boys and girls are employed in trades and services.

The inclusion of handwork in the curriculum of special classes appears to have paid two dividends (1) in adjusting the pupil entering the class and (2) as a "preparatory-pre-vocational" training.

The data provided by Mr. Robert Oliver, teacher of the Handicraft Class in Woodstock Central School is especially valuable to show that graduates secure and hold a succession of jobs. We shall need machinery for exploring this aspect of employment.

Wages ranging from $7. to $40. per week are reported. Individuals are reported as staying a few days on a job to as much as 10 years. A very large percentage of the eligible males is in war service.

Conclusions

The data are insufficient for sweeping conclusions. In general this information shows for this particular group:

(1) that the results of individual instruction have been effective in that graduates have developed in keeping with their capacities;
(2) that a high percentage of graduates are employed and earning a living;
(3) that a very low percentage of the graduates are or have been in schools of correction, jails, reformatories or mental hospitals;
(4) that a considerable number of the girls remain at home under parental guidance and guardianship;
(5) that pupils with a very low academic ability are able to find and keep jobs in industry, trade and the services;

(6) that a large number of the orthopaedically handicapped can be made economically independent.

The evidence presented shows generally
(1) that for more reliable conclusions a larger number of cases should be collected;
(2) that more complete records are desirable and necessary:
(3) that training in special classes is efficient with the possibility that the state is saved the expense of institutionalizing an unknown percentage of retarded pupils;
(4) that achievement tests giving the scores in ages or grades would be superior to marks and percentages for records of performance.

Suggestions

(1) There is need for a general record card showing the child's progress through school. Since the A.D.P. card has not sufficient space either a separate employment record or a folder embodying the information on the A.D.P. cards and the Employment Record is necessary. The following is a proposed form of Employment Record.

Employment Record

Name.....Birthday.....

Address.....Age on Admission.....

Racial Extraction..... Age on Graduation..... Months in Class.....

Achievement	Read	Arith	Vocab	Handwork
On admission				
end of 1st yr.				
2nd year				
3rd year				
4th year				

Intelligence				
Date	C.A.	M.A.	I.Q.	Examiner's Initials

Employment act description	Name of Employer	Date Employed	Date Discharged	Period of Employment	Wages or Salary	Period Unemployed

(2) Standardized Achievement Tests should be available in Reading, Arithmetic, Language, etc. It is easier to interpret the achievement of pupils in terms of what the normal pupil can do at a certain age than it is to know what is meant when an individual has obtained a certain percentage on an examination paper or a set of examinations.

A statement that George X.... made the same score as the median pupil of a group which is 11 years 4 months old indicates far more exactly his achievement than a report showing 35% in arithmetic or an average of the subjects examined.

Pamphlets on the Education of the Physically Handicapped No. 3

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Acknowledgment is hereby made of the suggestions and contributions made by Dr. Florence S. Dunlop, Psychologist, Public School Board, Ottawa; the corrections and suggestions made in the first draft by Miss Clara Binnie, Senior Speech Teacher, Board of Education, Toronto; and the suggestions made by Mrs. Rosalind Kalbfleisch, Speech Teacher, Public School Board, Ottawa.

DATA ON STUTTERING

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I. Purpose

On several occasions after speaking to service clubs on the education of the physically handicapped, the writer has been asked by one or more of the members present to suggest methods for the elimination of stuttering. On one occasion three persons present at the same meeting asked for information on the re-education of stutterers and were promised a summary of the available data. The first draft of this pamphlet consisted of data sent in response to those specific requests and is presented now in different form.

In rural and urban surveys, cases of stuttering are met frequently. In conversation with the teacher, teaching methods are suggested which have been productive of successful rehabilitation of stuttering speech. Where there is no specially trained speech teacher (and that is the case in all but ten municipalities in Ontario) the regular grade teacher may or may not undertake to instruct a stutterer and may only carry on this work until the pupil is promoted. For these reasons a statement of practical procedures is necessary.

II Definition

On the North American continent the term "stammering" is more frequently used to indicate halting defective speech. Stammering in United States texts includes stuttering. In the British Isles stammering is the term used to indicate lisping, letter substitutions and other defects of speech which are not a-rhythmical while stuttering is the term used for halting defective speech. For that reason the term stuttering is used in this pamphlet to describe what in North America would also be called stammering.

Stuttering is halting defective speech which is characterized by retardations, repetitions, accelerations, prolongations or arythmical grouping of words. The stutterer has difficulty in producing sounds or words. The difficulty may come at any part of a word or phrase or appear between words. Stuttering is sometimes accompanied by spasms, contortions and emotional strain.

The examples given below are classified according to the distinguishing features of each:

Stutter - A person is said to stutter when his speech is marked by:

(1) retardations, e.g. - Uncle John ---- (pause for a struggle to utter the next sound unit) ---- had lived on ---- (similar pause) ---- the frontier while a (similar pause) ---- grew to maturity.

(2) repetitions e.g. M-m-m-m-m-ary had a l-l-l-l-l-little d-d-doll.

(3) accelerations, e.g. One day they ---- (pause) ---- went all the way to the ---- lake. (The words are jerked out in groups.)

(4) prolongations, e.g. Fffffather sssssays ththhthat nnnnnnnumerous ccccomplaints.

(5) the use of starters e.g. (a) Ah-ah-ah-It was quite late ---- ah.
(b) (And) Aunt Mary ---- (now) told John and Mary, (and, and) ---- that after the ship ---- (and) left the harbour.

(6) Arythmical grouping or phrasing e.g. John has wh/---- white rat. It has bright eyes, fine/---- hair, small/---- ears and a/---- long tail.

The peculiarities of the stutterer's speech may be associated with physical and mental conditions. Muscular cramps or spasms of the diaphragm, larynx, soft palate, tongue or lips may occur. The pupil may have a fear of using his voice before the class, before strangers, over the telephone or any audience situation. This fear may appear to involve particular sounds, words or phrases. The pupil may have feelings of inferiority and over-anxiety and may exhibit neurotic symptoms.

III. Research on Stuttering

An examination of the literature shows that stuttering cannot be traced to any single disease, or cause. One report indicates that there were over one hundred and fifty different causes for stuttering in the cases which had been investigated. The evidence shows that left-handedness, disease and neuroses appear most frequently in the case-histories of stutterers as the following research students show:

(1) Scripture, Glogan and DeBra found that 25% were or had been left-handed or had in their immediate families some member who was left-handed. They reviewed 500 cases. They found that of those who had in their immediate family some member who was left-handed 92% were stutterers.

(2) Bryngelson reported that 62% of 200 cases of stuttering were originally left-handed and had been required to shift to the right hand for most major manual activities (including writing). He also found that 55% had convulsions, meningitis, severe whooping cough, diphtheria or pneumonia in pre-school years.

(3) Sacks found that a number of German war veterans whose right hands had been amputated became stutterers when trained to use their left hands.

(4) Travis reported that 30% of the cases seen in a period of three years showed histories of having had febrile diseases with deliria, transient nervous disorders such as St. Vitus' Dance and neuromuscular instabilities of unknown origin and nature prior to the onset of stuttering.

From the above we have concluded that nervous, physical, mental or emotional shock is present in many of the case histories of stutterers. We should assemble all the data possible on the diseases and activities of the afflicted pupil before aattempting to relate cause and effect.

IV Hygiene of Stuttering

In the home The usual hygiene as regards food, bathing and sleeping should be observed. Ten hours of sleep is recommended for every child who has any co-ordinational difficulties. If the child has bad sleeping habits, they should be corrected. The stutterer should always sleep alone and should never sleep in a room with the opposite sex. Coffee and tea should not be taken. Guidance should be given to avoid slight attacks of excitement and depression and he should not be allowed to be too boisterous and gay if corresponding amount of depression seems to follow.

Conditions which put the child stutterer under pressure to use speech should be avoided. No stutterer should be discouraged by his contacts with life to the extent that he plays alone and replaces his interest in real life with an interest in books and day dreams. The child also should never be put in a position when he cannot talk freely.

Nagging of any kind or description must be avoided. The parent must find other means of obtaining the proper responses.

If the child's general co-ordinations are exceedingly faulty, he may drop books, tear his clothes, slam doors and break china. In such cases, he should be given as much latitude as possible and the opportunity for developing muscular co-ordination in group games and in doing outside chores and messages.

The stutterer who is left-handed sometimes has difficulties with door knobs or the conventional placement of the knife and fork. The reports of Sacks and Scripture et al show that when the use of the preferred hand is interfered with there are evil results.

The rhythm of the stutterer's speech is lacking to a great degree. For this reason swimming, dancing and singing are recommended for their effect on rhythmical breathing and control of the diaphragm. This is particularly true if abdominal and diaphragmatic cramps occur in stuttering.

In the school

Much of what has been said in the section "In the home" is true for school conditions. The teacher should attempt to help the parents by observing the child in the home. If an invitation to dinner will create a formal situation, it would be better omitted. A normal child can develop a very adverse emotional reaction to a teacher who fails to appreciate his pets, possessions or achievements. In the case of a stutterer these reactions may be more severe. Any suggestions made to a parent should be made at a time when the child is not present. Where the parent will quote the teacher to the child, the teacher's suggestions may aggravate the situation. It would be better to give no advice where the child will be victimized, threatened, coaxed, cajoled or persuaded in your name by either parent.

The stutterer must be treated with the utmost in successful diplomacy and consideration. The teacher has a great power over his emotional life and happiness and should not laugh at him or permit other pupils to do so. Continual repetition of questions or correction may destroy the pupil's trust in the teacher.

Nearly all persons stutter occasionally. It may occur when the speaker is tired, or confronted by a large audience. Some people are robbed of the power of speech in the audience situation. Others when trying to use very careful language or when thoughts do not come easily will find themselves stuttering. Any of these conditions aggravated beyond the normal stage may become pathological and is called stuttering.

If the teacher notes that the stutterer has a monotonous voice to a degree that he does not have approximately normal inflection is not to be confused with the voice in song which is known as a monotone. Training for flexibility should be given with a view to modifying the condition.

The most helpful management of the stutterer includes the use of all known aids for the stabilization of the spirit, soul, mind and body of any human being. The methods for each individual case vary in relation to the individual needs.

V. Relaxation

Examiners note that the stutterer tenses his muscles and must be taught relaxation and control. Nearly all speech lessons are preceded by some exercises which tend to loosen any tense muscles. All books on speech correction give details of relaxation exercises. Others may be found by checking over the quiet rhythmic exercises in a Physical Training Manual. The following are given as examples of those actually used.

(a) Physical exercises for relaxation:

(1) Head rolling. Let the head drop forward and roll easily on its own weight from side to side.
(2) Roll the shoulders backwards and forwards with ease and looseness.
(3) Rag Doll Exercise - Hold whole body as loosely as possible. Arms limp at the side. Shake head, arms and whole body loosely.
(4) Standing erect, balance on the balls of the feet and spring easily up and down, raising the heels.

(b) Relaxation Technique:

A. The following technique of relaxing was demonstrated at the Cheltenham N. E. F. Conference in 1936, by the late Miss Richardson who was at that time Senior Speech Teacher for the Education authority under the London County Council.
(1) Lying on a flat couch stretch the body and arch the back. (The arching of the back follows the relaxing technique of the cat lying beside the open fire or stove.)
(2) Yawn two or three times - (as wide as possible).
(3) Close the eyes and open the mouth. Breathe through the mouth. Put the arms down along the side of the body with hands unclenched and then mentally go over the body muscles, nerves, etc., ordering them to relax, ease and rest. (The order may not be important but the following order is feasible - Toes, soles, heels, ankles, calves, knees, thighs, hips, pelvic area, stomach area, chest area, neck, upper back muscles, middle back muscles, lumbar area, hips, each vertebra of the back bone, neck, scalp, forehead, eyes, lips, mouth, cheek, jaws, throat, shoulders, upper arm with biceps, elbow, forearm, wrist, hand, fingers and thumbs.)

When stomach breathing commences the person is relaxed. The teacher can note if the pupil is relaxed by lifting the arm and noting whether or not it falls limply.

If it is difficult to secure relaxation, use suggestion by having pupil try to visualize the blue sky.

B. A less cumbersome method which has worked perfectly in the six cases of extreme stuttering so far tried is as follows:
(1) With the pupil lying on his back on a flat couch (or table) ask him to tighten

strain and flex all muscles as much as he can. When this has been done get him to raise his hips off the couch and rest his weight on his heels and his shoulders. (This is to arch the back.)
(2) Reverse this condition by saying " Now do the opposite in everything. Let yourself down and loose your muscles as much as you can."
(3) "Yawn as wide as possible."
(4) "Close your eyes and try to see the colour of a bright blue sky."

When the pupil's arm is perfectly limp he is relaxed. In this condition the six cases of stuttering (the only six cases thus far tried) were able to answer questions normally and do such other things as count to fifty and repeat memory work. It demonstrates to the pupil that he can talk naturally.

This relaxed state should be maintained for at least a few minutes during which time the pupil should visualize himself talking without stammering, winning races, or visualizing other activities.

After relaxation conversation may be attempted or any other exercise which seems useful in the individual case.

(c) Mental Relaxation

If the deep-seated cause of the stutter is due to some shock, fear, hidden sin (real or imagined), feeling of insecurity, suspicion, emotion, etc., the best plan is to employ a psychiatrist. As this is not feasible, the next best plan is to bring this secret out into the open whereupon it vanishes because it appears to thrive only in hiding.

It is necessary to establish thoroughly the happiest relationship with the child, and to talk with him about things. The interested friend may thus get from him his own thoughts and experiences. With some evidences of his background and his ways of thinking, the slow process of digging into his experience can be carried out. Sometimes the questioner does not discover the actual causal factor, but the fact that the pupil (or patient) feels he can unload his cares tends to remove the fear. In other cases, the secret is uncovered, layer by layer. The childish and inept rationalizations (largely fiction) are removed and the child is free. There is nothing against a sympathetic person practising this method but it is not often tried by teachers because of the length of time it takes to carry out a sufficient programme.

(d) Breathing in Speech

Breathing exercises may serve to relax the pupil and to develop better control of breathing while speaking.

1. Stand erect and inhale through the nose gently and easily. Exhale through the nose keeping an even breath stream. Repeat and exhale through the lips.

2. With hands on hips, (fingers forward at the base of the ribs) draw the breath in quickly through the mouth as if startled or frightened.

3. Inhale through the nose and hold the breath while thinking the count of five. To the same count exhale through the nose. Repeat and exhale through the lips.

4. Inhale slowly as you raise the arms forward to the level of the shoulders. Hold arms outstretched and retain the breath while counting five mentally. Drop the arms gradually while exhaling slowly to the mental count of eight. Repeat raising the arms outward to shoulder level.

5. Inhale and exhale alternately as in panting. Do this rhythmically. First to a slow count and then to a quick count.

6. Take slowly a deep breath through the mouth. Exhale through rounded lips slowly while blowing on a thin strip of paper held in front of the mouth. See how steadily the air stream can be controlled.

7. (a) Breathe in easily and comfortably. Breathe out slowly while whispering various vowels such as ah, ei, oh, etc.

(b) Breathe in as in (a) Breathe out while counting in a whisper or in full voice.

(c) Breathe in as in (a) Breathe out with lips closed, turn the breath into a sustained hum.

8. While walking smartly, inhale slowly and comfortably. Hold the breath up to six steps and exhale while walking an equal number of steps.

VI Methods of Re-educating Stutterers

The first step in any method is to secure data showing as completely as possible the physiological, physical, psychological and educational development of the child. All information possible should be collected because there are so many possible courses.

The following are methods which have been used successfully:

1. Concert Reading with a Pupil or an Adult.

(a) The teacher reads orally the first paragraph from the reader with the pupil. In the second paragraph the teacher lowers the voice or whispers. In the third or subsequent paragraph, the teacher allows the pupil to read a sentence or more alone.

(b) In the regular classwork two pupils read orally in concert. In some cases the stuttering pupil makes one of the pair of readers. The teacher should not use this device exclusively for the stutterer.

2. Distraction with Hetero-Suggestion.

Convey to the pupil the idea that the exercises will probably help and possibly cure him of his difficulty. Then use some of the following devices to distract his attention from his customary stammer and to build up his confidence.

(a) Have the pupil practise talking in time (and breathing in time) to the bell of a metronome set to ring at every fourth beat, -

(i) uttering one syllable at a time.
(ii) uttering one word at a time.
(iii) uttering one word-group at a time.

(b) Have the pupil practise talking while he varies the pitch of his voice in accordance with some specified melody pattern.

(c) Have the pupil practise elongating all the vowels in his utterances, e.g. Jooooooo-hn beeeeeee-l-ieeeeeeeves.

(d) Have the pupil practise talking while he varies the volume of his voice in an arbitrarily specified manner. Have the pupil, for example, whisper one word, say the next in a normal voice, then shout the next, etc.

(e) Have the pupil practise breath-grouping his utterances in novel ways (e.g. - one word in the first breath group, two in the second, three in the third, four in the fourth, one in the next, etc.)

(f) Have the pupil practise summoning up a vivid visual or auditory image to accompany each word he utters.

(g) Have the pupil relax all the muscles of his body before speaking and then supplement this by easy, rhythmic breathing during speech.

(h) Have the pupil do some stiff physical exercises, and when he is relaxed put a book in one hand while he swings the other arm and hand ask him to read. The teacher should not make any remarks about reading, but if the pupil stutters should draw attention to the arm-swinging by saying "Keep your arm swinging".

(i) A variant of (h) is to have the pupil squeeze the large muscles of the upper left arm with his right hand (or vice versa) and read holding the book in the other hand. The teacher's injunctions should not contain any reference to reading, but should draw attention to the distraction.

(j) Some pupils can read well if the teacher will steady them, either by resting her hand on his shoulder or by putting her arm around him.

3. General Speech Correction Methods.

The stammerer often appears to have his lips in position for the letter "a" when he is trying to say the initial letter "m" or "f" or any other letter. In this case it may be advisable to try ordinary speech correction for letter substitutions. The demonstrations should be given with teacher and pupil both facing a large mirror.

Teachers are referred to the chapter on Speech Correction in the book "Training Handicapped Children" for drill exercises on specific speech elements.

4. A Rhythmic Method.

This has been used with marked success by Dr. Florence S. Dunlop, Psychologist to the Ottawa Public School Board in cases where she undertook to instruct individual cases which came to her attention.

Vowel sounds with an accompanying consonant are spoken to definite rhythms. If this is done rhythmically it relaxes and puts the child at ease.

It gives him confidence that he can say all the sounds if he forgets about himself.

The vowel sounds:- ā - as in bate
ē - as in beet
ō - as in boat
aw - as in bought
---
aw - as in bottle
ĕ - as in bet
oo - as in boot
ă - as in bat

ū - as in beautiful
ow - as in bowt
ī - as in bite
oi - as in boil

ĭ - as in bit
ŭ - as in but
oo - as in booh

The rhythms: - (a) $\bar{1}$ $\bar{2}$ $\bar{3}$ $\bar{4}$ - The stress on each sound is the same but they are spoken in groups of four.

(b) 1 $\bar{2}$ - Stress every second syllable - say them in groups of two.

(c) 1 2 $\bar{3}$ - Stress every third syllable - say the syllables in groups of three.

(d) 1 2 3 $\bar{4}$ - Stress every fourth syllable - say them in groups of four.

As an illustration of how it is used the letter "b" has been placed in front of the vowel sounds given in the list.

Rhythm 1	Rhythm 2		Rhythm 3	Rhythm 4
bā	bā		bā	bā
bē	X bē		bē	bē
bō	---		X bō	bō
baw	bō		---	X baw
---	baw		baw	---
baw	---		baw	baw
bĕ	baw		bĕ	bĕ
boo	bĕ		---	boo
bă	---		boo	bŭ
---	boo		bŭ	---
bū	bŭ		bū	bū
bow	---		---	bow
bī	bū	bĭ	bow	bī
boi	bow	bŭ	bi	boi
---	---	---	boi	---
bĭ	bī	booh	---	bĭ
bŭ	boi		bĭ	bŭ
booh	---		bŭ	booh
			booh	

In Rhythm 1, the child would say with the teacher equally stressed nonsense syllables in groups of four as follows: -
Bee, bay, boh, baw, ----- baw, bē, boo, bā, ------ etc. slowly and in that order at the rate of two per second. The teacher can acquire a sort of time calibration by listening to the four-beat rhythm of a watch.

In Rhythm 2 two nonsense syllables are spoken in about the same period of time as was given to each syllable in Rhythm 1. Each second syllable is accented as baybee, bobaw, etc., in the same time as is allowed for one syllable in Rhythm 1.

In Rhythm 3, the time is about 3/4 second with the accent on the last of each group.

In Rhythm 4 the time is about the same as the four beat rhythm of a watch with the accent on the fourth syllable.

(In Rhythm 2, 3, & 4 while the speed is increased it is important to think of the individual syllables. Two or more syllables should not be tied together into one word regardless of speed at which they are spoken.)

Any other initial consonants may be used. A really difficult exercise is to use these vowel sounds in conjunction with both initial and final consonants or syllables. As for example

mane	mean	moan	mawn
mawn	men	moon	man
mun	mown	mine	moine
min	mun	moon	

VII. Methods of Changing Handedness

A very complete set of directions for changing a left-handed pupil who has been required to use his right hand is given in Travis - Speech Pathology pp. 287 - 288. This book will be loaned to any teacher who seeks information on this topic. Extreme precautions should be taken before attempting to change handedness.

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Note - The above named books may be borrowed by addressing your request to the Inspector of Auxiliary Classes, Department of Education, Toronto. The book may be kept two weeks. In making the request it is necessary that you mention the name of your school and the name of the school inspector to allow us to check by looking up Schools and Teachers.

Pamphlets on the Education of the Academically Handicapped #2

Prepared by C. E. Stothers, Inspector of Auxiliary Classes.
Department of Education, Parliament Building, Toronto

OPPORTUNITY UNITS

THEIR ORGANIZATION AND OPERATION

Department of Education - January 1944 - 500.

Purpose

This pamphlet is prepared to show the application of administrative, philosophical and pedagogical principles in providing individual instruction for retarded, slow-learning and average pupils in the small school where there is an insufficient number of pupils to organize a class.

Description

An Opportunity Unit is an instructional device by which one or more pupils are taught at their individual levels. It provides for different levels of instruction particularly in reading and arithmetic at points where performance may be demonstrated successfully. It involves a careful individual examination of each pupil and the provision of instructional materials which fit the peculiarities of the case. Subsequently the teacher carries on instruction.

Administrative Details

The examination may be made by an inspector of schools or a teacher who holds the auxiliary certificate or one of the inspectors of the Auxiliary Classes Branch. After this examination an advisement is prepared which details methods, books and materials advised for the pupil. (This advisement may be written by any inspector although they are most frequently prepared by the Inspectors of Auxiliary Classes.) Two copies of the advisement are sent to the inspector concerned so that he may have one for his files and one for the teacher concerned. When the books and materials are ordered by the local school board, the teacher can carry out the directions contained in the advisement.

Through action of the inspector or the teacher, the school board concerned applies to the Inspector of Auxiliary Classes for the establishment of an Opportunity Unit for pupils in need of special educational facilities. When this application has been received and approved, the Board is eligible for full re-imbursement grants on expenditures on the special materials to a maximum of ten dollars ($10.00) per annum for each pupil. The application is a sort of agreement by the board to supply special materials for such pupils as are designated by the local inspector from time to time. No grant is paid if the application is not on file in the records of the Auxiliary Classes Branch.

In June of each school year, the teacher prepares a progress report showing quantitative and qualitative progress of each pupil and the difficulties which still remain. These progress reports are forwarded to the Inspector of Auxiliary Classes for review and are subsequently returned to the inspector concerned. Along with the progress report, the school furnishes a statement of the disbursements made on the opportunity unit on Forms A.C. 10 provided through the inspector. These are collected and forwarded to the Auxiliary Classes Branch where the grants are made up, warranted and submitted to the accountant for payment.

Originating an Opportunity Unit

Opportunity Units are set up as a result of two or three different chains of events as follows:

(1) A teacher may write to the Auxiliary Classes Branch seeking advice on the instruction of an atypical pupil. After securing the necessary information the Inspectors of Auxiliary Classes furnish suggestions and advice on methods and materials which should result in the educational progress of the pupil. Annually about one hundred teachers seek such information.

(2) An inspector during a regular or special visit to a class or school may administer an intelligence test, an oral or silent reading test, or any other test, to a pupil who requires special instruction. He may write his own advisement for the pupil and send a copy to the Auxiliary Classes Branch w ith the test reports. When an application is received from the Board concerned, it is approved on the basis of the inspector's recommendations.

(3) If an inspector requests the Auxiliary Classes Branch to survey his inspectorate the following procedure is carried out:

(a) Tentative dates are mutually agreed upon;

(b) A supply of Forms A.C. 7 & 9 is sent to the inspector;

(c) The inspector distributes a copy of Form A.C. 9 to each teacher for a list of pupils who are academically or physically handicapped. Form A.C. 7 accompanies Form A.C. 9 as it gives the directions for selecting pupils.

(d) When these forms are returned to the inspector he summarizes the pupils and reports the number in each classification to the Auxiliary Classes Branch;

(e) A sufficient supply of Form A.C. 15 for The Canadian Intelligence Examination or Form A.C. 3 for the Terman Binet Scale is sent to the inspector.

(f) Form A.C. 4 is a reprint of the front page of A.C. 3 and A.C. 15. If an inspector wishes to have a duplicate of the teacher's, nurse's and examiner's reports, he may ask for a supply of these as well.

(g) The inspector supplies each teacher with a sufficient number of copies of Forms A.C. 15 and 4 (or Forms A.C. 3 and 4) for all academically handicapped pupils listed in Sections V and VI of Form A.C. 9. No copies need be made out for the physically handicapped pupils. The principals are requested to have these forms completed before the survey begins.

Surveys can be completed with less loss of time if the forms are ready for the examiners. Some inspectors request that the forms be returned to his office before the survey begins.

(h) A representative of the Auxiliary Classes Branch accompanies the inspector to the schools concerned. Both conduct examinations. From 35 to 70 examinations can be made in a week depending on whether the schools are reached conveniently or not or the number per school is large or small. The months of September, October, May and June are most suitable for surveys of rural schools.

Since a survey normally takes two weeks, the inspector may elect to conduct it in two successive weeks or in two separated weeks.

(i) After the examinations have been made advisements are prepared in duplicate for each pupil and sent to the inspector for distribution to the schools.

(j) Since an application for the establishment of an opportunity unit is required before any grants may be paid, the inspector may elect to have the principal of the school handle it or he may p ersonally attend to it. Where the principal attends to the completion of the application, necessary explanations are made during the visit to the school.

Note - Advisements are written in code from an advisement key. A copy of the key to the advisement is left with the teacher at the time the school is visited after an explanation. Directions for ordering books and materials are printed on the back of the form on which the advisement is written.

Educational Principles Involved

The Opportunity Unit of Instruction is operated on the following sound pedagogical principles:

(1) The achievement levels in reading, arithmetic and vocabulary are located and instruction is begun at or slightly below these levels.

(2) The rate of learning is found to guide the teacher in carrying out the plan.

(3) Emotional reactions to particular books are avoided by choosing books which have not been used before and are therefore not associated with hour by hour, day by day, week by week and year by year frustrations.

(4) Handwork, crafts and enterprises are suggested to assist in overcoming the results of lack of success and to provide a measure of practical achievement which has been denied these pupils in school work. Their adjustment to reading, arithmetic and spelling is assisted by success in handwork. It is really an application of practical mental hygiene.

The standard of work is not that of the shop or factory. The standard should be gauged from the quality of the first handwork project completed. Each succeeding project should show some improvement.

(5) Since comprehension levels in language may be higher than performance levels in reading or composition, oral and practical work in social studies and science may be conducted at higher levels than written exercises or research exercises.

Illustrations from Educational Experiments

Educational experiments in learning have a direct application to individual methods. In setting up a scheme whereby education proceeds from the actual achievement levels of pupils, is carried on at individual rates to the accepted standards, or to capacity and is fitted to the particular abilities and needs of the pupil, it is well to review the evidence of scientific experiments.

(1) Thorndike's Experiment on Practice

Thorndike wished to test out the value of blind practice in order to test the truth of the statement "Practice makes perfect". He blindfolded himself and attempted to draw one hundred four-inch lines. This was carried on until he had practiced it three thousand times. An assistant measured each line and Thorndike discovered that although he had had a great deal of practice he had not been successful. He concluded that blind practice was not useful.

The writer discovered a boy who had attempted long division for three years without success and without any attempt boing made by the teacher to rectify the condition. The boy learned quickly when the method was changed, but had no success in applying mechanics which were taught and retaught in the same way.

The experiment provides a basis of argument for variety in method.

(2) Pavlow's Experiment in Animal Learning

Pavlow wished to study the results of attempting to learn things which were beyond the ability of the learners. He experimented with dogs because more positive results appear in animal learning. He taught a group of dogs to differentiate between a circle and an ellipse. When the learners had accomplished this, the ellipse was made more circular each day until a point was reached where the dogs could not distinguish the difference. Two types of reactions were noted:

(a) One group exhibited the reactions of growling (defence and temper) howling, hiding, trembling (fear).
(b) The remainder apparently showed no reaction except avoidance.
(c) The dogs of both groups could not be interested or persuaded to make any further attempts with the learning materials.

Transferring and interpreting these results on the human level we can see some reason for frustration producing temper tantrums or defence mechanisms. Pupils have been reported as flying into a temper when asked to do subtraction. A common defense mechanism is to avoid answering. These and other evidences support the opinion that teaching should not be attempted at frustration levels.

(3) The Learning Curve

Experiments in learning show that there are periods of rapid progress which may be followed by periods of retrogression or little progress. In charts of learning these periods of retrogression or cession are called plateaus and may endure over a considerable period before further progress is recorded.

It is conceivable that these plateaus could represent periods of frustration. They might be periods of over-learning in which all factors are knit together before which further progress occurs. If this is the case they could serve to explain that a certain pupil fails to make progress in reading because he has over-learned and become over-dependent on single letter-phonics with consequent slowness in blending and reading speed.

(4) Abstractions vs Realities

In the 1940 Summer School an experiment was set up to show some of the effect of using real things in teaching. Three subjects were chosen which would not be familiar to the teachers and a description was prepared which would require eight minutes to read as follows:

Part 1.- Building a Schooner
Part 2.- Building a Barn
Part 3.- Tropical P lants in the Allan Gardens.

The teachers were divided into three groups each under a different instructor. Each group rotated and was given the information under the following differing conditions:

(a) The description was read to them.
(b) Diagrams were used in connection with the description.
(c) Models in Parts I & II and actual specimens in Part III were examined by the groups.

Each group was subjected to a different type of simple instruction in rotation and at the end of each period was given a question paper.

The scores on the question paper showed as follows:

(1) Answers to questions on a description read to them.	100
(2) Answers to questions on a description read to them and illustrated by a diagram.	112
(3) Answers to questions on a description read to them and illustrated by a model.	128.

The experiment shows the superiority of instruction with actual materials or a three-dimensional model. It throws some light on the reason for the efficiency in learning to count real or toy money when symbols fail to be understood.

Administration of the Opportunity Unit

This devolves upon the teacher who may resist attempts to vary her methods away from mass teaching. The attitude of the teacher is important. He must be seized of the idea of instructing at the pupil's level, the need for pupil's success and the requirement of proceeding at the pupil's rate.

The materials available should be furnished in sufficient quantity. Readers with accompanying workbooks, language and arithmetic workbooks, books on speech correction and materials for handwork should be freely available.

When the teacher has been furnished with the advisement form and the Key to the Advisement, he should read over the paragraphs in the key which have been specified in the advisement for the pupil and list the books and materials which have been recommended.

Since the reimbursement grants are limited to a maximum of ten dollars ($10.00) per pupil per year and since the advisement normally provides for approximately two year's work, the teacher is advised to decide how much of the books and materials can be purchased without exceeding the grant limits. These supplies can be ordered through the channels approved by the local board.

Most of the advisements are written for pupils who are poor in Reading, Arithmetic and Language. Nearly all contain suggestions for Handwork. Reading is the most frequent single cause of school failure.

When the supplies arrive and instruction begins, the teacher may find that the initial reader appears to offer little difficulty to the pupil. In the preparation of the advisement such books are purposely specified in order to allow the pupil to read through it quickly. For a pupil who has been attempting to read at frustration levels, it is recommended that remedial instruction begin at or slightly below his actual performance level.

Reading from books which are quite different from the remainder of the class may be resisted by the pupil. For this reason care must be taken to introduce the pupil to the book.

Sound mental hygiene practice dictates that no junior pupil should be allowed to use the same or another copy of the pupil's special book. It may be necessary to include the pupil in the regular reading lessons using the authorized reader and to do extra work from the specially selected reader.

Crafts, enterprises, construction work are advised to provide some immediate measure by which the pupil can gauge his own success. Because certain handicraft materials are available locally, it is often possible to start craft work before the books for remedial work in Reading, Arithmetic and Language are received. If a successful project in woodwork or sewing can be completed in this period, it will help in adjusting the child to the new academic tools.

The teacher's organization should be elastic enough to allow the pupil to take different subjects with different classes. In a one-roomed school this can be arranged. In an urban school resistance may be found to enrolling a pupil in his age group and sending him to one room for arithmetic, to another for reading and coming back to his own for social studies, science and crafts.

The teacher should be informed that books on crafts, remedial methods in reading and arithmetic and speech correction are freely available to teachers of opportunity units. They should send a request to the Auxiliary Classes Branch stating their needs and should mention their school and inspector by name so that the records may be easily checked.

Manners are another thing the teacher can stress. Any improvement can be praised honestly. Cleanliness and business habits should be trained.

Sample Progress Reports

The following reports come from the Progress Reports furnished by teachers of opportunity units in 1943.

Harold X - Opportunity unit started September 4, 1942.
Reading: In June 1942 Harold was reading at a level of Grade 3. Recognizing and pronouncing words did not form as great an obstacle as the grouping of words and giving an expressive delivery. So far he has read about three quarters of "Streets & Roads". He has also read 18 supplementary books of various reading levels. At first pupil had a tendency to read unnaturally loud and taking in only one word at a glance. His tone has been lowered and pupil can now read considerably better, grouping words in phrases and having shading in the tone of his voice. All reading lessons have been individual. Combined with reading Harold has completed the exercises in "Think & Do Work Book". Exercises involving subject and factual matter have been most successful, while those involving sounds such as comparing long and short vowels have not been so good. Harold now is reading too quickly and his mind is travelling faster than his eye, with the result that he adds words that do not exist, especially at the end of a sentence.
Arithmetic: Harold knows his multiplication tables to 10 and can divide by a single divisor and multiply with a two digit multiplier. He also knows his dry and linear measures and can change one degreee of measurement to another. His only difficulty is interpreting problems but this is slowly improving as he does more of that work.
Crafts: He has completed making with coping saw a Dutch doll and a couple of animal toys that were given away as Christmas gifts.

Allan X - 14 years - Unit started November 1942.
In June 1942 he was not capable of doing Grade 1 Reading and Arithmetic.
In June 1943 he reached a good Grade 4 level in Reading - Read under observation "Along the Way" "Friend & Neighbours" "Fun With Dick and Jane", "I Know a Secret" "Our New Friends" "Manners Can Be Fun" "Gulliver's Travels" "Helpers on a Boat" "From Farm to Garden" "Friendly Village" "If I Were Going" "Kites & -" "Kalulu the Hare" "Wide Wings" "Pinnoccio" Milk from the City" "The Baker Makes Bread" "Black Beauty". He has read stories from school magazines - has mastered single letter phonics and many combinations.
Arithmetic: has done exercises in Lennes Tests and Exercises I & II. Can add & subtract pretty well - has begun multiplication - does not remember facts but counts them on his fingers.
Handwork: enjoys all handwork and does it as well as Grade VII and VIII - takes the same as they do - bird houses, window boxes, also other coping saw, metal work, painting on glass, etc.

Ellwood X - Age 11 - Is ready for Grade 5 in all except reading which is his particular drawback. He dislikes a number of the stories in the special readers - prefers mostly those about animals and even lately he has grown tired of them. He did not care to continue the stories about Dick and Jane and Mrs. Hill on Pleasant St. I do not know why, nor could I find out. He is improving in spelling having mastered the words in Book.I of EVERDAY WORDS as far as Page 27. He obtained 49/50 at Easter and full marks in June. In Arithmetic he is good except that owing to his poor ability in reading the problems have to be read to him. Then he goes right ahead. Has been working both problems and mechanical work in Self Help Arithmetic and obtained 75 marks at Easter and 95 in June. He dislikes Essentials of Everyday English because it is so simple but gets along fairly well if allowed to do the ordinary work in Grade 4 English, as long as he has explained to him what he is to do.

I notice particularly a great change in his manners and disposition. He used to be easily teased and used to get into a regular tantrum over it but now he is jolly and I never see any outbursts of bad temper. He is becoming quite gentlemanly in many ways and I really like the boy. He was the one that was represented to me as such a hard boy to manage but I have had no trouble with him at all. Kindness and a little praise and encouragement go a long way.

Douglas X - Opportunity Unit established November 1940.
Grade June 1942 - Arithmetic II; Read IV.
We have quite successfully covered the Arithmetic according to advisement - Grade II course as outlined in Training Handicapped Children. There seems to be an awakening of a number sense this year which hasn't been in evidence before. Reading: a fair oral reader. He enjoys silent reading and knows and understands what he has read. English is greatly improved. He writes a good letter and a fair story. Spelling improving.
He takes a great pride in handwork. His work would not take any prize but a great improvement in neatness and cleanliness has resulted.
Chief difficulty still existing is that of overcoming slowness in number work.

Gerald X - Established 1940.
Gerald has read during the year from September 1942 to June 1943 Treasury Readers Primer and Book 1; Gateways Primer; Jim and Judy; Fun With Nick and Dick; the Christmas Stocking; Milk for the City; All Through the Day; Down Our Street; We Grow Up . We used the preparatory book with Jim and Judy and We Grow Up. Gerald has learned to add quite accurately, subtract with carrying; multiply with two numbers; divide - short division to nine, and long division with two numbers. He now understands problems and can work them out quite successfully. He has learned all the Roman Numerals, and knows his multiplication tables up to five by heart. Besides his own arithmetic text book he took Grade III Arithmetic and enjoyed doing the problems as he could get them correct.

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Pamphlets On The Education Of The Academically Handicapped No. 3

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REPORT ON A KINAESTHETIC METHOD IN REMEDIAL READING, SPELLING AND COMPOSITION

Department of Education, Toronto
October 1944 - 500 copies.

Purpose

This pamphlet is prepared to report results from the use of a Kinaesthetic Method in remedial teaching of pupils in Opportunity, Handicraft and Special Industrial Classes and to set forth the details of the method.

History:

Kinaesthetic training has been recommended by writers on pedagogical techniques representing each historical era from the time of Plato. The materials herein set forth have stemmed from the writings of Gates, Kirk and Fernald and from the work done by Ontario teachers who carried on with the method after it was demonstrated during inspections of special classes during March, April and May 1944.

Organization of the Report

The report has been organized as follows:

(1) A Special Method For Individual Cases in Remedial Reading (and Spelling).
(2) A Group Method for Spelling and Composition.
(3) Reports on Individual Cases.
(4) Miscellaneous Observations.
(5) Summary of Results.
(6) Bibliography.

A Special Method For Individual Cases in Remedial Reading (and Spelling).

Success in teaching pupils who are backward or seriously retarded in reading has come from the application of the following principles:

(1) Location by formal tests or informal methods of the pupil's reading levels;
(2) The use of books and materials which suit the levels found;
(3) A temporary change of teaching method such as (a) Where the pupil has failed at phonics, he will not be started on a remedial programme with phonics but may be started with picture-cards or memory-reading, etc. or (b) Where the pupil has not used phonics he may be started on phonics even if it is merely intended as ear-training.
(4) Progress is made at the pupil's individual rate.

One of the chief difficulties in remedial teaching of reading is the imbalance between the pupil's spoken vocabulary and his reading vocabulary. Another difficulty is to interest a pupil in or approaching the 'teen ages in books written for the six-year-old. The chief hazard, of course, is the effect of frustration in reading which has been carried over a period of years.

It is desirable, therefore, that a method which uses the pupil's vocabulary and his interests be available at least for the initial period of remedial reading. If the method also works to demonstrate success to the pupil, it will be much more valuable, because the pupil must be able to see and measure his own progress. The methods described below are claimed to be a way of combining four necessary elements in reading (spelling and composition). The pupil should see, hear, speak, and write the words at the same time. It is possible that our general methods and accompanying materials are too visual for some pupils who have failed in reading.

An initial lesson by the Kinaesthetic Method (combining the Kinaesthetic sense in writing with the senses of sight, hearing and the vibrations of speech) would go somewhat as follows:

1. - Conversation as an Introduction

Teacher - What are you interested in, John?

Pupil - I don't know..

Teacher - I mean what would you like to do? What would you like to be when you grow up? You must be interested in something.

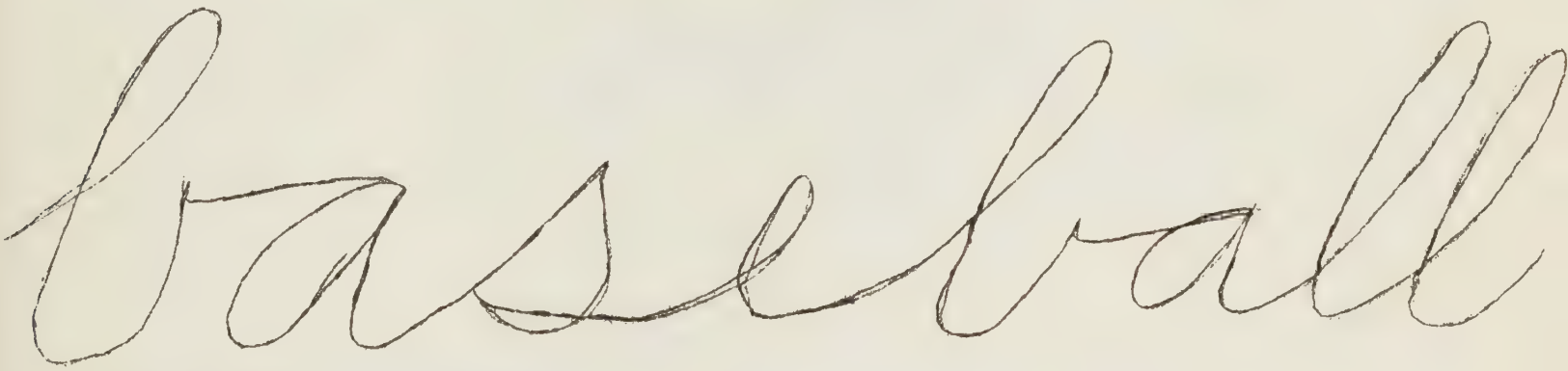
Pupil - I like to play baseball and hockey.

Teacher - I want you to wirte that on this piece of paper. I will help you with any word you can't spell. You just write the words you know and leave the others blank and tell me.

The pupil writes - I lic too plae - and -

2. - Preparation of Materials

The teacher prepares five cards 3" x 9" by writing with crayon in large (blackboard-size) handwriting the three misspelled and the two words on which the pupil has frustrated. The cards can be made by cutting large sheets of drawing paper into four pieces. (Drawing paper is suitable because of its rough surface.) A sample is shown below. If the pupil print-writes the sample should be in print-writing.



3. - Practice

In the example given it would be well to start with a small word such as "like". The card is given to the pupil and he is told. "Say the word (out loud) and then trace it with your forefinger". (A demonstration may be needed.) "You are to say the word out loud and trace it with your finger over and over, until you think you can write it without looking".

Some children start out half-heartedly and follow the directions under compulsion. The finger should be straight and should be in contact with the paper. Tracing should not be done with a pencil.

Some pupils will wet their fingers to get the smudged appearance which comes from tracing.

When the pupil feels he can write the word without looking, he does it on the back of the sheet containing his original sentence. He may take from five to thirty tracings before he feels sure. It is important that he have success with the first word.

The procedure is continued until the five words have been written independently. The teacher may find that the pupil misspells some words when they are attempted independently and it will be necessary to continue practice in first saying the word and then tracing it.

In the initial lesson, it is probably not necessary to break large words into syllables but this may be done with a senior pupil when it seems to be necessary.

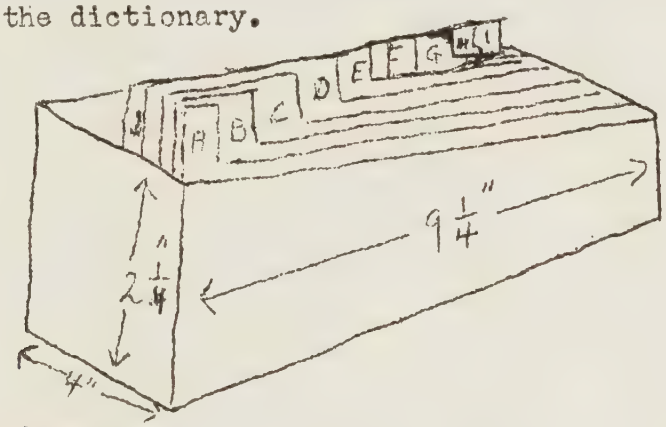
4. - Test (1) The pupil is now asked to write the sentence without help from the teacher and without looking at the original or the cards. If errors occur, the tracings of those words are done again, unless the pupil can make the corrections himself.

(2) The sentence is typed and the pupil is asked to read it.

5. - Filing Words

The words misspelled are filed in a wooden box which has been fitted with divider sheets arranged alphabetically.

These cards are used for review and the filing is an exercise preliminary to using the dictionary.



Inside measurements

$2\frac{1}{4}$" x $9\frac{1}{4}$" x 4"

6. - Illustrating the Lesson

If the sentence has been typed at the top or bottom of a suitable sheet of paper, the page may be illustrated by drawings or by pasting appropriate pictures on it. Its purpose is to become page 1 of a reader which uses his own vocabulary at his individual interest level.

7. - The Second and Succeeding Lessons

These should stem from the pupil's own interests whether they are diffuse or not. If the interests are scattered, it will not make a very good sequence of stories but the teacher should not try to change it.

Our experience shows that it is not good practice to supply words to be included in the pupil's written story. Words which can be elicited from the pupil by suggestion are satisfactory. It is a good practice to use the pupil's own words and watch his powers grow.

The tracing of words should continue until the pupil can write the new words by looking at them. This may be an outgrowth of reviewing the words in the box-file.

Summary

From the description one can see:

(1) that this is an individual method which employs the interaction of the stimuli received by the ears, eyes, speech organs and the muscles used in writing;

(2) that finger-contact is essential;
(3) that black-board-size writing is important;
(4) that the pupil's interests and vocabulary are used instead of the vocabulary of a beginning reader;
(5) that the pupil has a measure of his own success in the stories and in the number of words filed;
(6) that filing the words prepares for the ultimate use of the dictionary;
(7) that the teacher may elicit words by suggestion but should not supply words;
(8) that tracing should be continued until the pupil shows ability to write words after looking at the written form;
(9) that large words may be broken into syllables when the pupil is ready for it.

A Group Method For Spelling and Composition

A class of twenty or more pupils may be given the same sort of introduction as is indicated for the individual method. It is usually wise to allow more choices. Experiments have been conducted with pupils in Opportunity, Handicraft and Special Industrial Classes with the following choice of subjects, including the instruction that a pupil may write on one or more of them.

The instructions or suggestions given were:
"I want you to write as much as you can and tell me as much as you can about

1. What you want to do in the holidays;
2. What you would like to be;
3. What you like to eat;
4. What you like to wear;
5. What pets you have or would like.
6. What clothes you would like (for girls).

You are to write as much as you can. If you come to a word you can't spell, you may leave a blank space. I shall come along and help you with the hard words. Write as much as you can even if you can only write a word or two".

The procedure then called for the teacher to have a supply of cards 3" x 9" and to circulate among the pupils supplying the necessary words. After the class has made a serious attempt and a fair percentage have some words to trace, directions as to tracing are given as in the case of individuals. The words are traced in the usual way and the pupils may go to the blackboard to show that they can write the word independently.

Such a technique would prepare pupils for independent writing of stories in Social Studies and Science as exercises after a regular lesson. If each child was supplied with a box in which to file his words, it would proceed somewhat after the same manner as the individual method. A teacher who collected the cards after such lessons and recorded them would have a list of words which should make an excellent spelling list.

Report of Individual Cases

Reports of three cases are reported in full detail below:

Case 1 -

Miss Thelma Donaghy of John Fisher School, Toronto, reports as follows: "I am forwarding the information regarding the experiment in Kinaesthetic Reading with Xerxes Xenophon. It proved most interesting and very effective in his case. I carried on for four weeks, and during that time he learned the 110 words which I have listed. I feel that the results were much farther reaching than just Reading. This boy developed a nice turn of phrase which astonished me.

One of the chief difficulties which accompanied Xerxes' reading disability was his inability to spell. Even the easiest words gave him difficulty. However after the four weeks I gave him a spelling test using the Buffalo Scale. Xerxes had graded 4.0 on the test in January of this year and on May 23 he graded 4.7. This I feel was due to the improvement in reading and the handling of words.

Name	Age	I.Q.	Read. Grade	
			Before	After
Xerxes Xenophon	12 years, 5 months	78	3.8	4.3

Stories

1. I would like to fly an aeroplane after the war, if I am old enough. I'm interested in aeroplanes, because it is nice up in the air. I've wanted to be a flier all my life.

2. John Fisher is a nice school and Miss Donaghy is the best teacher. I'm in Grade 5 in the Opportunity Class. I like Arithmetic, Reading and Spelling. I do not read very well.

3. Castlewood Road is very pretty in summer. It is off Eglinton. There is a gas station on the corner of Castlewood. I have lived there for five years. I have many friends on the street.

4. Horses and oxen have to be trained to do errands for mankind. Sheep are useful too. They stay in the grass fields. During every year their coats are cut. Wool is soft and white. You can make stockings out of wool. You can make other things too. You get the wool from the sheep.

5. Fat Fred and Blue Fred were enemies and they did not know why. If one could play a trick on the other he was happy. They went skating one day. Fat Fred was not so fast on skates. They had a race and both of them fell into the cold water. The farmer's wife put them to bed, and gave them warm drinks. They were not enemies any more.

6. I am interested in swimming. Swimming is very refreshing in cool water. As soon as I can I go swimming in the pool at Hog's Hollow. I swim in Little Cedar Lake too. I can do the Australian crawl and the breast stroke. Sometimes I get water in my nose and it gives me a funny feeling. I cannot dive very well yet. My father says he will teach me this summer.

7. Little Cedar Lake is 145 miles north-east of Toronto. First we go to Peterboro and Lakefield. After you pass Burleigh Falls there are many hills, and when you get to the top of them it is like a roller coaster. You go down so fast that your stomach hits the top of your head when you go up the other hill. I like the drive very much.

8. The cottage is a very pretty place in summer. It is painted white and red. There are many trees around it. The trees are mostly cedars. They smell nice when it rains. I like to stay there very much. We go shooting, fishing or swimming in the mornings. At night the lake is shining, and the moon comes up over the tree tops. We hear the loons call away out on the lake. They make a funny noise. I like to hear them.

Vocabulary

aeoplane
aeroplanes
all
Australian
Arithmetic

because
best
breast
bright
Burlei gh

Cedar
class
coaster
coats
comes
cottage
corner
could
crawl
cut

dive
drive
during

egg
Eglinton
enemies
enemy
enough
errands
every

Falls
farmer's
feeling
fields
first
flier
fly
five
Fred
friends
fight
funny

head
hear
hill
hit
Hog's

holidays
Hollow
horses

I'm
I've
interested

kind
know

Lakefield
life
loon

many
mostly

night
nice
noise
north-east

off
one

Opportunity
oxen

painted
pass
Peterboro
place
pretty

race
rains
refreshing
Road
roller

shining
skates
skating
smell
Spelling
stating
stockings
stomach
street
stroke
swimming
summer

teacher
their
there
through
trick
too
trained

useful

wanted
war
warm
were
when
white
why
wife
would

years

gas
grass

This is a total of 110 words which were learned in 4 weeks. After a lapse of two weeks Xerxes was asked to write the 8 complete stories from dictation. This he did with an average of 2 errors per story."

Case 2

Miss Lela Easton, Queen Victoria School, ~~North Bay, reports:~~
"I am enclosing four compositions written by Julius Justinian, born 26.11.31 - I.Q. 65 - Grade 3 Reader - Wide Wings - More Streets & Roads.

Julius can spell both orally and written all the vocabulary taught. He has written these stories - one a week - finishing "My Holidays" on Monday.

I like the method very much and plan on an English note book for next year using one page for the story with the opposite page for the vocabulary learned in the story.

1. I want to be a soldier, and ride a tank. I would shoot down a Jap plane with the tank I ride. I would like to smash a Jap tank and a German one, too. I would go right into Jap buildings.

2. My Garden:
This year I planted potatoes, beets, lettuce, cabbage, onions, spinach and carrots, t

I was weeding my garden the other night. First I weeded the potatoes, then the beets, lettuce, cabbage, onions, spinach and finally my carrots.

I like to have a garden but it means a lot of work.

Sometime I would rather play but my garden must be taken care of first.

3. My Scooter:
I made a Scooter this year. I bought a pair of roller skates off Paul Leeds Then I got a board from Mr. Lydford. Then I measured it, sawed it, planed it and nailed it together.

I painted my Scooter red, white and blue and now I am ready to take it home.

4. My Holidays:
In my holidays I am going swimming every day in Trout Lake.

I will go up on the hill with my friends and make a cabin in the bush.

We will have lots of fun playing cowboys, hide-and-seek, blind buff, big fat sausage, statue and lots of other games."

Vocabulary Taught

1.	2.	3.	4.
want	garden	Scooter	holiday
soldier	planted	bought	swimming
ride	potatoes	pair	friends
would	beets	roller skates	cabin
Jap	lettuce	board	cowboys
Plane	cabbage	measured	hide-and-seek
smash	onions	planed	blind buff
German	spinach	nailed	sausage
right	carrots	together	statue
buildings	weeding	painted	games.
	finally	ready	
	means		
	care		

Case 3

Mr. Jospeh Stubbins, Warren Park Handicraft School reports on Lucius Lucullus:

"Lucius Lucullus - I.Q. - ?; C.A. 15.0; Reading level 3.2; Spelling - 2. Words learned and fingered - 81, many others learned incidentally.
Sample stories follow. Recall - almost perfect.
Evaluation: The experiment was applied most consistently in this case. Interest was continuously good for about six weeks. Has gone back to it periodically since. No question of it giving this boy a definite "lift".

Story 1

I would go and look for an aeroplane book. Then I would read what I could out of it. Then I would go and get maybe an easier one.

If I wanted to go to a show I would go out and earn the money to go and see whatever picture was on.

Story 2

I went to the show. Oh, I did not see much. Yes the picture was fine.

During the week-end, I helped to paint the boat..... I went to the store about five or six times for my mother.

Story 3

This morning we took up all sorts of things. We didn't have science this morning. We read books instead. Later, I shellacked the handle to my knife and helped clean up Mr. MacLean's room. Then, I worked with Small for awhile on the door. Then, I came in here. That was quite a morning!

Story 4.

The teacher said, "What will we talk about to-day?" With a shrug of his shoulders, our good friend, Creighton, replies, "Oh, I don't know."

Yes, sir, I think that I am making progress in reading. How many words do you think you know? Oh, about fifty.

Story 5.

I would like to know about the training that the soldiers have to go through before they go overseas. They have to leap big high things in two seconds, swing on ropes, climb rope ladders, walk across rope bridges. The R.C.E. has to go ahead and build bridges so that the tanks and artillery can get across. The R.C.A.F. has to go ahead and clear the road by bombing all the places.

Story 6.

We do woodwork, metal shop. We take things up here that no other school does. We have three steel lathes, two wood ones, and two drill presses. One of these is brand new. We have a forge, an anvil, and a new too crib we built down in Mr. Pheeney's room. We are making a new drafting table. We do all the work around here ourselves. Ever since the school started there has been a tool crib down in Mr. MacLean's room.

Every Friday afternoon, there is a program. Either we make it up ourselves or send down for pictures to General Electric.

Story 7.

I don't know of any stories. But I will do the best I can.

I went riding on Sunday. I went down to Roncesvalle and Dundas. I rode for about two hours. Then I came home. That's about all I know.

Story 8

What were you doing during noon hour? I was wrestling out in the school yard with Wettlauffer and a whole bunch of other boys. There was no one watching us; we were fighting ourselves. We don't know who won the fight. We fight every afternoon. It's just for the pleasure of fighting. We get pretty dirty but the ground is fairly dry now and it's not too bad. I guess that's about all."

Miscellaneous Observations

Some of the reports indicate that the teacher dismissed the method as one requiring too much time. It is noteworthy that these observations came from teachers who have not been long away from large classes and the use of class (mass) instruction. Excerpts from reports are as follows:

(1) "This boy learns by the Kinaesthetic pattern because he startled himself by writing two long words after five finger tracings. It is too early to evaluate this yet but the short-term effect on interest is marvellous. As a result of this boy's experience, a few other boys asked about this "black-magic" and they carried on with little or no supervision."

(2) "I have tried different stories and find that the pupil doesn't improve as much as I think he should from one writing to the next. I also found that pupils would trace the words only a few times. One even smeared the words with a wet finger to make me believe she had done it a number of times."

(3) "I have frequently been asked if there is any carry-over from lesson to lesson. That, of course, depends on the frequency of the lessons. To be really effective there should be a daily lesson. In a class of over thirty pupils no teacher can spare the time for daily individual lessons of about thirty minutes duration. .....As a remedial method for backward pupils, it has much in its favour."

(4) "I tried it out with a boy about fifteen years old reading in Grade IV with an I.Q. of 112. It was a failure as far as he was concerned because he refused to trace the words and write them on the blackboard. His excuse was that it was "baby" work and he did it for you only because you were the inspector. He is a very determined boy with a serious heart condition so I didn't persuade him to try it again."

Results

From the evidence thus far collected, this form of the Kinaesthetic Method has shown as follows:

(1) efficiency in teaching and learning reading in cases of pupils whose capacity is rated as about 70% or higher;
(2) some startling successes;
(3) some failures due to mind-set or emotional reactions;
(4) poor success with pupils whose capacity is rated below 65%;
(5) a need for daily lessons;
(6) that an instructional period of 4 - 6 weeks is needed.

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Pamphlets on The Education Of The Physically Handicapped No. 6.

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THE EDUCATION OF THE HOME BOUND PUPIL

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Department of Education, Toronto.
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Purpose

This pamphlet is prepared for teachers who for the first time take over the duties of teaching one or more home-bound pupils. It contains suggestions from teachers who have had several years of successful experience in instructing children who are confined to bed or to the home by reason of accident, crippling or disease.

The Problem

Home Instruction differs from classroom teaching in that it is primarily individual instruction of pupils whose vitality is low and that it takes place under less formal conditions. Daily lessons are seldom possible and are not required under the Regulations. Most of the teachers carrying out home instruction undertake the work without previous training. In rural schools the teacher must perform these duties after regular school hours. For these reasons, information which has been found useful to full-time home-instruction teachers has been collected and is herein presented.

Organization

The pamphlet is organized into the following sections:

(1) Purpose.
(2) Problem.
(3) Organization.
(4) General Suggestions to Teachers.
(5) A Typical Lesson.
(6) Conditions Met In The Homes.
(7) Methods of Securing the Co-operation of Parents.
(8) Methods of Securing the Co-operation of Pupils.
(9) Handwork.
(10) Selected Cases of Successful Home Instruction.
(11) Illnesses Which Cause Pupils to be kept from School.
(12) Exerpts from the Auxiliary Classes Act and Regulations.
(13) Bibliography.

General Suggestions To Teachers

In undertaking home instruction, you are carrying the school to the home where conditions are much different than in the more formal school atmosphere. The following suggestions are for your guidance:-

1. Learn all you can about the child's illness.
2. Be neat and punctual. Enter the home as a friend and take a sincere interest in the home as well as the pupil.
3. After the first visit avoid lengthy discussions with parents.
4. Never allow the pupil to feel that you regard him as anything but normal.
5. Do not ask the pupil any questions about parents or visitors.
6. Adhere as closely as possible to your schedule. If you are tardy in arriving or irregular in your calls, the routine of the home may be entirely disrupted for the day.
7. Do not be too aggressive as the child may only be able to do a limited amount of work.
8. Use the utmost discretion if it is necessary to reprimand the pupil for inferior work. The cause may be entirely due to his health rather than to lack of effort. Praise the pupil honestly for improvement and for reaching good standards of performance.
9. Be careful in introducing Religious Studies.

(10) When making promotions from one grade to the next, use some of the tests given in the school which the pupil would ordinarily attend. It may not be advisable to give all the tests taken by pupils in attendance. Pupils who pass these tests will easily adjust themselves to school conditions.
(11) Do not commit yourself on the probability of the child's promotion until you know the child's abilities as revealed by home-instruction conditions.
(12) Watch carefully your assignment of homework to be sure that it meets the child's needs, without over-taxing his strength.
(13) Never give pupils money as a reward for school work or for any other reason.
(14) Do not discuss matters with the parent if you think the child is able to return to school. This should be reported to the Principal or in small areas to the pupil's doctor.
(15) If possible, contact the pupil's regular teacher before he returns to school. The parents should be asked to get the doctor's approval before the pupil is allowed to return.
(16) Report all cases of lack of co-operation to the Principal or, in small school areas, to the Inspector.

A Typical Lesson

It is suggested that when beginning lessons with a home-bound pupil it is necessary to use every minute to advantage. For this reason, the pupil should have all books and tools in readiness for the teacher's visit.

At the beginning of each lesson a minute or two can well be devoted to topics of interest to the pupil. It may be news, pets, friends, hobbies or even a surprise.

The following order is suggested:-
(1) Dictate spelling.
(2) Correct it while giving orally the new assignment.
(3) While the pupil is reading orally, correct the homework in arithmetic.
(4) Check the mistakes in arithmetic and then teach any new lessons. Assign homework.
(5) Correct the English exercises and explain the errors.
(6) Explain the new work in English and give a new assignment.
(7) Social Studies should be frequently carried on by the use of questions left by the teacher. When the answers are satisfactory, notes shall be prepared by the pupil.
(8) Handwork instruction should be given.
(9) Provide reading materials in natural science. Upon occasion, carry specimens to be examined.

The homework for each pupil should be written in an assignment book, the amount given being dependent on the disability of the child. Stress is put on the three R's because of the limited time and because if these are up to standard, the child adjusts himself more easily to the work of his grade on returning to school.

Conditions Met In The Homes

The homes visited may be roughly divided into five catagories:-

(I) The systematic middle-class home where everything is orderly and clean. There one finds the greatest co-operation which is reflected definitely in the work of the pupil. Children in such homes progress to the full extent of their mental capacity because of the influence of the mother.

(II) The middle-class home where disorder reigns, provides conditions which make it difficult to secure a desirable degree of co-operation. The mother is well-meaning but cannot visualize the neatness and order needed for successful work. She lacks system in carrying out her household duties and her inconsistencies do not result in the child giving his best work. This effect is more clearly seen among children of the early grades who are unable to study alone.

(III) The very prosperous home where the mother is a club-woman or is engaged in social activities may be a place where the mental and physical needs of the invalid child are left to the maid.

(IV) The very humble home. The character of the child's work in a home of this type depends on the outlook of the parents. It does not follow that because there is lack of money, there is also lack of efficient co-operation. In these homes the teacher often receives the greatest appreciation of her services.

(V) The home presided over by a neurotic mother. These may be classified as follows:-

(a) The over-anxious mother;
(b) The mother who protects her child from the teacher;
(c) The mother whose real preference is for a place in the business world and who resents home duties.

In many such homes the ill-health of the child is prolonged by the fears, emotional reactions and attitude of the mother. Against such backgrounds, the teacher must bring to bear a very healthy emotional and social attitude.

Methods of Securing the Co-operation of Parents

At the first visit the teacher should be a good listener and should permit the parent to discuss the child, physically, socially and emotionally (in a place where the child cannot hear). The parent should be acquainted with the teacher's time-table, the salient points of the course for the grade and should be requested to co-operate in having school-work performed during regular school hours.

The pupil and parent should be made to understand that the pupil is to do the work unassisted. Interested and capable parents should be encouraged to drill the pupil in mathematical tables and in spelling. The assigned work should be done in a quiet room without distracting adult conversations or radio programmes.

The importance of suitable lighting should be stressed. Many beds are placed so that they face the window. Artificial lights should be placed so as to throw no shadow on the written work. Artificial lights should not shine directly into the pupil's eyes.

The mother should find that the teacher is not simply a pedagogue; that she is interested in the problems of the household; that the teacher is not bothered by the fact that the house is upset or the dishes unwashed; that the teacher keeps to her schedule and does not remain more than the allotted time.

A small percentage of the parents have to be prodded with recitals of what pupils of a similar age, grade and ability are doing. Some require a sales talk on the advantages of home education over the system whereby the incapacitated child was forgotten.

The child's physical needs should be observed carefully, particularly in cases where epilepsy is indicated. A teacher who has not experienced a pupil in what is called an epileptic fit should not have any fear of it. If the mother is called promptly the teacher need do nothing. To prevent injury to the tongue, a pencil or tongue depressor should be placed between the teeth. In the more humble home it is well to enquire about the need for glasses, dental care and the child's food preferences. During the depression, home-instruction teachers were helpful in many cases in securing food and clothing. The Ontario Crippled Children's Society, Queen's Park, Toronto, can be helpful in advising on braces, wheel-chairs, and special equipment for the crippled if the teacher advises them about a particular case.

In the lower grades, especially Grade I, it has been found advantageous to have the mother present during the lesson period. She is better able to help the child with his assignments during the interval between lessons. Almost invariably the mother will co-operate with the teacher in overcoming weaknesses in a subject, as she can drill multiplication facts or spelling while conducting her household duties. Where the mother appeals to the teacher for co-operation in teaching good health and dietary habits, the teacher should assist as much as she can.

Methods of Securing the Co-operation of Pupils

Supplementary reading is useful in securing the co-operation of the pupil. The promise of a library book often inspires hard work.

The home-bound pupil is familiar with the examinations of his brothers and sisters and finds it quite natural to try short tests. This is particularly true with bright children. The test papers and workbooks of other pupils may be shown to stimulate effort. Other devices are (1) letters written and received from other home-bound pupils; (2) telephone conversations with other pupils; (3) graphs of progress

Anything which demonstrates a sincerity and interest in the individual child is helpful in securing the desired response from the pupil. His interests, ideas and hobbies should be explored. While the teacher should not habitually use rewards, it is permissible to give such things as a stamp for the collection, a copy of an advertisement for a new dog-biscuit for a prized pet, or a book on the care of canaries, parrots and budgerigara where such pets are kept. Small gifts of this type have often produced the desired results.

Stress should be placed on birthdays, holidays and special occasions. Surprise gifts made by the child for the parents combine creative ability and enjoyment for the child.

Co-operation is given by the child once he realizes that his home education provides him with a niche in the social scheme. In cases where pupils have become introverts, parents are convinced that instruction has been instrumental in building up a more healthy outlook.

Lastly, there is the overworked star system of rewards. Where five gold stars merit a seal and make Johnny study spelling more assiduously, it can be used for a short period.

Handwork

Handwork is used to interest pupils and to provide occupational therapy which, if omitted, would permit the pupil to dwell too much on his own physical condition. The teacher of the home-bound pupil is apt to omit manipulative types of handwork possibly because it does not look like school work or appear to lend itself to inclusion in a teaching period which appears altogether too short. Another reason for omitting Handwork is that some of the experiences of teachers have been unsuccessful chiefly because they personally had very little experience with arts, crafts and hobbies.

Model-aeroplane building as a craft and stamp-collecting as a hobby are not usually successful if introduced before the age of twelve. Colouring and cut-out books as well as scrapbooks can be introduced at an early age. Jig-saw Puzzles can be made in cardboard and made progressively more difficult until the pupil is able to work out the commercially-produced puzzles. Paper and oilcloth weaving are used in the primary grades and can lead up to the use of a Weavette on which squares can be woven and pieced into shopping bags and afghans. The eight-to-ten year old can be initiated into the mysteries of corkwork (spool knitting) and can use frames to make cushion tops from wool or teapot mats from cord which in either case is wound on the frame and tied where the cords cross. Sewing, basketry (on wooden bases), felt work, braiding, knotting, silk-screen printing are other crafts and hobbies which can be used to advantage. The teacher should be interested in and should encourage the pupil's use of the toys supplied by the parents.

In cases where home instruction is to be of short duration, handwork may not need to be stressed but in those cases where the pupil is home-bound for long periods, or permanently, it is of great importance in preparing him for some sort of habilitation training. Gifted children, slow-learning children and direct-learning children should have some definite handwork or hobby or constructive work.

For up-patients who are confined to the home, large murals in crayon, chalk or tempera colours are recommended. The ordinary drawing-paper exercises can be helped considerably by the large-sized drawings which may be done on a large sheet of wrapping paper or wall-paper. The drawings will have better perspective if they are done on a large easel or on a sheet pinned to a wall.

Encouragement should be given to teen-age pupils who are up-patients to secure tools and work-table or bench for coping-saw carpentry and other handwork such as Leathercraft, Tin-Can Craft, Hand Pottery, Rug Making, Simple Stitchery, Tatting, Embroidery, Needlepoint, etc. Where it is possible, a typewriter should be secured and with the aid of an instruction book, the touch-system of typing should be taught.

The following bibliography is prepared to guide teachers in their search for suitable handwork and hobbies for pupils:

Ackley - How To Make Marionettes - Copp Clark - 16¢

Newkirk - Integrated Handwork For Elementary Schools - Gage - $3.70.
(Contains a glossary of materials. The peep-show, puppets and blue-printing seem to be suitable for home-bound pupils.)

Newkirk and Zutter - You Can Make It. - Things To Do With Scissors and Paste - Gage - $3.45.
(Thin wood, paper, cardboard, wire, cloth, balsa, dowels, inks, paints and paste are used with other common materials to make decorative and useful things.)

Palmer - Coping-Saw Cut-Outs - Gage - 80¢.

Perry - Art Adventures With Discarded Materials - Clarke Irwin - $2.50.

Mochrie & Roseaman - Felt Toys - Macmillan - 75¢.

Fellowcrafters Series of Instruction Manuals - Ed. R. Lewis Leather Co.
8 Bathurst St., Toronto.

(a) Gimp Braiding Projects 48¢
(b) Metal Tooling 18¢ (This deals with metal foils which are not obtainable during the war.).
(c) Silk Screen Process Printing - 30¢
(d) New Clays For Old Uses - 18¢
(e) Chip Carving 18¢
(f) Easiweaving 18¢
(g) Leathercraft For Beginners 18¢ (A kit for making a belt, a pair of gloves or a pair of suspenders may be purchased from the Canadian publishers of this manual. Scrap leather may be bought for about 90¢ a pound.)
(h) Metalcraft For Beginners 18¢
(i) Amberolcraft 18¢ (Bracelets and rings can be made from blanks by using small files).

Note: - In 1944 the above books are available. Supplies for Leathercraft are also available.

Selected Cases of Successful Home Instruction

Case I. Erma - Heart disease made home instruction necessary. Instruction commenced at age 6. High School Entrance was attained at age 13. She attended Collegiate and was valedictorian and won a scholarship in English. Now in her second year in University she is preparing herself to teach Modern Languages. Her physical recovery has been sufficient to allow her to participate in normal activities. Parents state that home-teaching made this progress possible.

Case II. Arnold - a poliomyelitis victim was stricken when in Grade IV with practically one hundred per cent.. paralysis. Later in the year home instruction was started while he was on a frame with both arms and legs in splints. Gradually there was a partial recovery to the point where he could move about on crutches. In the five years he was under home instruction he completed Grade 8 with the High School Entrance certificate.

Case III Mary, a spastic paralytic who was tested at the age of nine and pronounced unable to profit by instruction, has had home lessons for eight years. She is now doing Grade 5 Arithmetic, Grade 6 Reading and Grade 7 Spelling.

Case IV Francis, a poliomyelitis victim who, after almost complete paralysis, recovered the use of his arms but not of his hips or legs. He now gets around in a wheel chair. He completed his Elementary School studies one year later than he would have normally if his studies had not been interrupted. The Correspondence School continued his education to the end of Grade X. He is now receiving training in shoe-repairing in an Habilitation Unit and has prospects of being self-supporting.

Illnesses Which Cause Pupils To Be Kept From School

The illnesses which are commonly found to be the reason for requests for Home Instruction are as follows:-

(1) Asthma and Congestion of the Bronchial Tubes.
(2) Birth Injuries - some are physically crippled and some are cripple-brained.
(3) Diabetes.
(4) Epilepsy.
(5) Fractures (especially in the winter)
(6) Glandular Diseases.
(7) Heart Cases - these are a large group including those who have had Rheumatic Fever and Scarlet Fever.
(8) Nervous Disorders.
(9) Operations.
(10) Poliomyelitis.

The following list shows the diseases which were recorded of Home Instruction pupils in one large Ontario city over a period of two years:-

	%		%		%
Anemia	1.0	Malnutrition	0.5		
Arthritis	1.5	Myocarditis	1.0	Rheumatic Fever	18.0
Asthma	5.5	Mastoiditis	0.5	Rheumatic Carditis	8.0
Bronchiectasis	4.0	Mitral Disease	0.5	Rheumatic Endocarditis	2.0
Bronchitis	3.0	Operations:-	14.0	Respiratory Infection	5.0
Cardiac Condition	8.0	1) Appendectomy		Scarlet Fever	1.0
Chorea	5.0	2) Plastic Surgery		Spasm of Leg Muscle	0.5
Colds (recurring)	1.0	3) Flat Feet		Spasticity	1.5
Diabetes	0.5	4) Fracture of Femur		Streptococcus Infection	0.5
Distrophy	1.0	5) Fracture of Tibia		Tuberculosis:	2.5
Eczema	0.5	6) Leg Amputation		1) Quiescent	
Endocarditis	0.5	7) Spinal Fixation		2) Spine	
Eneuresis	0.5	Osteomyelitis	2.5	3) Hip	
Epilepsy	4.0	Pneumonia	0.5	4) Peritonitis	
Haemophilia	0.5	Poliomyelitis	1.5	Tumor of Brain	0.5
Hodgkin's Disease	0.5				
					100.0%

Excerpts from the Auxiliary Classes Act

Section 2 - A Board may establish and conduct classes for children who not being persons whose mental capacity is incapable of development beyond that of normal mentality at eight years of age, are from any physical or mental cause unable to take proper advantage of the ordinary public or separate school courses.

Excerpts from the Regulations for Auxiliary Classes

Section I - Under the Auxiliary Classes Act, April 1914, the following classes may be established by a Board, subject to the approval of the Minister, on the report of the Inspector of Auxiliary Classes.
(14) Home Instruction Classes for children who are unable to attend school on account of a disability which will confine them for a period of not less than three months, and who are in receipt of not less than one hundred and fifty minutes of instruction in not fewer than two visits per week.
(17) Opportunity, Speech, Sight Saving, Orthopaedic or Home Instruction Units for children of a recognized Auxiliary Class type in school areas where the establishment of a suitable Complete or Partial Class is not feasible.

Section II - The maximum number of pupils on the roll of an Auxiliary Class, except with approval from the Inspector of Auxiliary Classes shall be as follows:-
(f) Home Instruction - 12 per full time itinerant teacher.

Section VII - Suitable and adequate equipment shall be provided for each Auxiliary Class according to the special needs of the pupils and as directed by the Minister from time to time on the report of the Inspector of Auxiliary Classes.

Section XI - The Legislative Grant For Auxiliary Classes will be apportioned annually for the preceding school year, on the report of the Inspector of Auxiliary Classes to each School Board responsible for the maintenance of the class that complies with the Regulations as follows:
(8) In an Opportunity, Sight Saving, Speech, Orthopaedic or Home Instruction Unit a reimbursement grant on the purchase of approved equipment and material. Maximum grant $10.00
(10) Sixty per cent., of a Home Instruction Teacher's special salary to a maximum rate of $60.00 per pupil in school areas of less than 10,000 population

Fifty per cent., of a Home Instruction Teacher's salary to a maximum rate of $500.00 per annum for a full time teacher, or $50.00 per pupil per annum where there are not less than six Home Instruction Units in School areas of less than 100,000, but more than 10,000 population.

Twenty-five per cent., of a Home Instruction Teacher's salary to a maximum rate of $250.00 per annum in school areas of more than 100,000 population.

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Pamphlets on The Education of The Academically Handicapped No.

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ORALLY NON-RESPONSIVE PUPILS

Auxiliary Education Branch
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INTRODUCTION

This pamphlet is prepared for the use of inspectors and principals of schools, and to present successful and unsuccessful experiences in educating children who do not respond verbally to questions put by their teachers. Such pupils may respond normally in conversations with children of their own age, yet refuse to answer the teacher. They frequently carry out the teacher's instructions correctly in every detail, except that of responding orally. When they do not respond normally, their behaviour is so unusual and baffling that the teacher may feel utterly frustrated.

These cases have been collected during approximately eight years of conducting survey work in urban and rural schools of Ontario. With one exception, the cases refer to pupils who attended schools during that period.

They have been described anecdotally to show such facts as were known when the case was discovered. An intelligence examination was given in all but two of these cases to secure basic data. The methods which were tried, whether successful or not, are described in some detail.

Case I - Jimmie C.A. 7.4; M.A. 3.5; I.Q. 47.

When Jimmie arrived at a rural one-roomed school, he was quite helpless in removing his coat and rubbers. An older sister had to do these things for him. He cried if he were separated from his sister for very long, and refused to play with the other children.

School work was a problem for the teacher. Jimmie could do very little except colour simple drawings. He would bring the book "Mary, John and Peter" to the primary reading class, but refused to utter a word. His sister was the go-between in all directions given by the teacher. Social pressure appeared to have little effect, except in the formal reading period, where he did join three other pupils for a five or ten-minute period. At all other times he held aloof from the pupils, unless drawn into a group because he was holding his sister's hand.

This behaviour continued from September through April. His sister reported that he would talk in an audible voice at home. In school he would whisper a few words to his sister, smile in a pleased way if the teacher praised his work, but would not talk to the pupils or to the teacher.

In April, he was excused one afternoon to go to the outdoor toilet. As he came through the door on his return he announced, "My barn's burning", in a quite loud voice to the amazement of the teacher. This was his first utterance in school. It did not result in the development of willingness to converse with the teacher.

An individual intelligence examination revealed a mental age of 3 years 5 months near the end of his first year in school. He began to respond orally at the end of his second school year.

His behaviour could be explained as a typical reaction of a sheltered three-year-old who found no need to talk to strangers.

Case 2 - David C.A. 7.2; M.A. 8.7; I.Q. 120.

David attended the Kindergarten class in a large city where he failed to respond to the teacher's instructions. He seemed bewildered by the class games, and although he tried to follow, would often make the wrong turns. He did not speak to the teacher or any of the pupils.

In his third year at school, his case was marked for a psychological examination which was expected to show that he was a candidate for exclusion from school on the ground of ineducability. The Kindergarten teacher had exhausted her patience and her repertoire of techniques for handling difficult children. His reactions were becoming more overt and temper tantrums were in frequent evidence.

A few days before the expected visit of the psychologist, the teacher of speech correction in the school happened to hear of this case and asked to see this difficult boy. Her examination indicated deafness or partial hearing as the cause. An intelligence examination showed him to be highly intelligent.

He was transferred to a Hard-of-Hearing Class, and very quickly began to learn to say words. In three months he was able to read orally from a Pre-Primer with the class as an audience. The daily use of a group-hearing aid greatly facilitated his speech development.

Case 3 - Paul C.A. 4.3; M.A. 5.1; I.Q. 119.

This boy was a youngest member of a family of three children in a better class home. The father was a medical doctor with a large practice which interfered with his home life. Paul at four years of age had not yet talked. He had been somewhat delicate in his second year of life at which time he required special care from his mother.

The outstanding fact about Paul was that at four years of age he had not talked, and had not learned to say any words. This situation bore heavily on the parents who feared that the boy was not developing intellectually. The boy understood directions and usually did what he was told.

One day when the family was seated for the noon-meal, Paul seized his sister's bag of candy. He was reproved, and did not return it to his sister. For this he was sent to his room. He dutifully got off his chair, marched to the door, closed it and his footsteps were heard going along the hall and up the stairs. Halfway up the stairs, he stopped and then retraced his steps. He came to the dining-room door, opened it, and said one word, "Pig!"

When it was discovered that he could say words, he was encouraged in every way. His vocabulary developed rapidly. His school progress was normal and ended by graduation from a university.

Case 4 - Andy C.A. 6.7; M.A. 6.0; I.Q. 91.

In 1940, the Auxiliary Education Branch received the following letter from a teacher in late November:-

"A boy, Andy, about six years old was enrolled in my class in September. He causes me more trouble than the rest of the class because he does not talk.

At our Teachers' Institute Meeting, I reported this case and asked the assembled teachers what they would do in such a case. I could get no answer. I attended another convention for the same purpose, and no one seemed to know what should or could be done with such a boy.

I shall be eternally grateful if you can give me some suggestions on what to do with him. His mother expects me to teach him."

This was a case in which the lack of data on the pupil was the chief difficulty if a suitable advisement were to be made. The following reply was sent.

"You appear to have a difficult problem on your hands. If the boy appears to be normal in his ability, I would try applying social pressure. In the kindergarten or Grade 1 you might do it by playing active games for a few minutes each half-day. When you have taught a few circle games or tag games, and you are sure that this boy is thoroughly familiar with them, you will choose a day in which you will have Andy take a part in which he is a principal figure, but does not have to say anything. You should show your approval of his success in carrying this out, and may have the class show their approval. Later in one of the dialogue games, you will choose the time when Andy will be placed in the position where he can win social approval by responding. Observe his reactions in singing games, and choose a time you think suitable to have him lead in a dialogue part. Develop his responses along this line, and stress social approval.

If this plan does not work, please send me more information by describing what you did in a particular instance or situation, and how the boy responded. I am not sure that this will have the desired effect as the data given is not sufficient on which to base sound advice. Do not try to develop this plan too quickly."

In March, the following letter was received from the teacher. "Andy is now talking. I worked out a programme of singing games, followed by active games in which there was some dialogue. Andy joined in the singing games and enthusiastically placed a kerchief in the hands of one pupil in the circle. Then he ran around the circle like a deer to the vacant place. I think I took your advice and delayed longer than I ordinarily would, but the training came along well and I may say that I believe in the usefulness of social pressure in Grade I."

In the following September in the course of a survey of the area, the Inspector of Auxiliary Classes examined this child, but failed to elicit any verbal responses from Andy. By using a performance test, his academic ability was assessed. The examiner's notes made at the time were "He makes a very peculiar movement of his lower lip when asked to do anything. Lower lip looks as if it were habitually compressed. Andy gave no audible response to (1) being weighed; (2) an oral reading test; (3) the offer of a stick of gum; (4) a book with highly coloured pictures."

Four years later Andy was re-examined. He was in Grade 6, and was having some difficulty with reading. The principal stated that Andy eliminated (defoecated) in his clothes when excited.

Examination notes were recorded as follows:- "This boy seems over-promoted. The Kinaesthetic Method was used to elicit and practice verbal responses. His spelling (and possibly his language for his oral responses are not yet normal) might be improved by continuing the Kinaesthetic Method. In 1941 I was unsuccessful in securing oral answers. Information given shows that Andy has severe reactions from talking, possible emotional reactions which may have commenced early in life."

Case 5 - Bill C.A. 11.4; M.A. 10.6; I.Q. 93.

In the course of a rural survey Bill's case came up. His family had recently moved into the section from a mining district because the father had been too long working underground. When Bill and his brother started to school, the teacher discovered that Bill would not answer questions. She was baulked at every attempt she made to secure oral responses. She felt doubly frustrated because Bill was reported as talking to his brother and to the pupils in the playground. Eventually she suspended Bill, and the school board upheld her to retain her services as teachers were very scarce.

Bill lived in a newly-constructed log house on the shore of Northern Ontario lake. To get there required a drive of two miles off the paved road and a walk of some minutes through cut-over bushland.

When we arrived a game was in progress and the two brothers were shouting to one another. When we appeared through the poplars, conversation ceased. The older boy took us to his mother and translated our request to be allowed to examine Bill in order that suitable provision might be made for his schooling. The mother gave her permission only to discover that Bill had disappeared into the poplars.

Eventually Bill was led into the cabin by the ear and because he did not talk the Ontario School Ability Examination was used. The results are given above.

In a discussion of Bill's case with the mother through an interpreter, no possible reason for his behaviour could be elicited. When we were leaving the mother mentioned that he had had an accident when he was about two years of age. By questioning the following story came out.

One day the mother put him in his high-chair near the phonograph. Some time later she was horrified to discover that he was putting a handful of phonograph needles in his mouth. In spite of warning shrieks, he put them in his mouth before the mother reached him. She admitted that he had screamed as she removed the phonograph needles quite roughly. Bill was rushed to the hospital, where it was discovered that one needle was in his gullet. This was removed by using a stomach pump and probably other instruments.

Bill's first experience with adults was a very unhappy one. It came at a time when his mother, a person who controlled his life and was the principal bestower of good things, showed fear and hysteria. This condition seemed parallel to cases, where mothers of young children who had been bitten by dogs, communicated their fears to the child by hysteria. This hysteria and emotionalism was synchronous with the child's physical pain.

This was adapted as a theory on which to base our plans for remedial teaching. We assumed that Bill had found to his cost that it did not pay to trust strange adults such as doctors, nurses and school-teachers. This meant that we had the problem of demonstrating the teacher's reliability and trustworthiness before two-way communication could be established. Bill would have to be given treatment which would insure that his success was advertised and his failures were not. Any responses to questions or directions were to be praised or approved.

His teacher flatly refused to re-admit Bill. The inspector arranged for his enrolment in The Correspondence School, and decided on a campaign which would have for its immediate aim the procurement of response in writing and its ultimate aim, a natural conversational response.

The following is the inspector's description of what he did.

1. "I called on 25.10.43 and found that the lessons had been started, and although he was very reticent, he did write several words I dictated."
2. About 15.11.43, I wrote Bill a short friendly letter, but had no reply.
3. On 20.12.43, I mailed him a Christmas card and a letter, but had no reply.
4. On 24.1.44 mailed him a picture puzzle, and received a letter from him very promptly.
5. On 31.1.44, I mailed him a picture puzzle map of Canada.
6. Called on 24.8.44, and found that he had completed the correspondence courses with the aid of his brother. He seemed more inclined to talk on this visit, and would nod or shake his head to questions, but made no effort to speak."

Bill's reply to the Inspector is dated Jan. 30th, 1944 - "How are you? I am fine. I have seen deer tracks, but I have not seen deer. We have 5 pigs now. I almost forgot to thank you for the puzzle. I got it picked together. Our cat has a sore foot, and it cannot walk good. I have not written any letters before. Our snow house melted down when the weather was warm. I will close now. Your friend, Bill.

In September, 1944, a supply teacher was in charge of the school. She was given all the facts in the case, and Bill was returned to school. She taught a Grade IV lesson on "By Use of a Magnet" from the readers using all the illustrative material she could collect. Bill replied to a question on what a magnet was. He continued responding to questions for the month of September, and even when the regular teacher returned. During the first year, he spoke rather slowly in a high-pitched voice.

Case 6 - Fern C.A. 7.1; M.A. 5.0; I.Q. 70.

Fern was interviewed and examined in school at age 7 years and one month. She was backward at home, and her entry into school was delayed until her younger sister was ready for school. At the end of the year she had not talked or responded orally in any way. Her school work was confined to such school tasks as the teacher could devise. The same suggestions as were given for Andy were given in this case.

In the following year, she was placed with her sister in Grade 2. She was reported as reading "A Garden of Stories" orally at home. She would talk occasionally to some pupils. She was reported as saying an odd word to an elderly neighbour who lived next door.

At the beginning of her third year in school, the father who had returned from war service was interviewed. He gave the following information:- "When she was one-and-a-half years old, she was left alone in the dining room with a delivery man while her mother went upstairs to get some money. The door was closed, and when the mother returned she was in hysterics. At age 4, she developed the habit of excusing herself by saying "I am too shy". This started when a neighbour from across the street called her a little boy. She showed fear of this neighbour. At age 6, she attended school for two months, and was withdrawn because the teacher thought it would be better to start again when her sister came along. Between the years 7 and 8, the mother sent to Eaton's for a wrist-watch which she would get if she would talk to her father when he was home on furlough. After her sister went to bed, Fern hovered around her father, but failed to say the required words. This stimulus had been tried several times over a period of eighteen months without success. The father thought that both children got too much candy and ice-cream when he was away. The children quarrel over who will be first to say her prayers.

This case has been a failure. The use of social pressure in group games was not tried because the classroom was fitted with fixed desks. A strong stimulus has been used and seems to have failed because there were no intermediate steps.

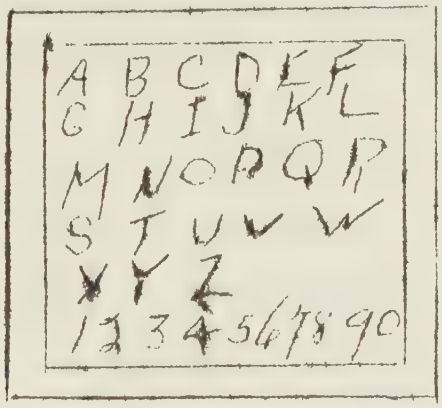
Possible reasons for her behaviour are:-

(1) the emotional storm which took place in the dining room when she was left alone with a stranger;
(2) the possibility that she should not have been withdrawn from school;
(3) the parental attitude;
(4) her mental age at the time of admission to school;
and (5) her relationship to her younger sister.

Case 7 - Alex C.A. 10 who is crippled by cerebral palsy.

Alex's case came to notice through the request of a Home Instruction teacher for help with a boy who either cannot or will not talk. The teacher found no way of applying stimuli or pressure to secure the desired result because Alex is a spastic or cerebral palsied case.

When the teacher arrives at Alex's home, he is always seated in a wagon which he can propel by his feet working through a hole cut in the floor of the wagon. His reading has been taught by means of a board on which are painted the letters of the alphabet. His arithmetic has been taught and his knowledge checked by using the numeral painted on the same board which looks like the diagram.



Two-way communication has been established, but thus far oral language has not been developed. Alex shows understanding of oral directions and because of cerebral palsy, may have a break in his nervous system which precludes speech.

CONCLUSIONS

From the data given, it appears reasonable to classify pupils who do not respond orally in school as follows:-

1. Those whose intellectual maturation has not developed beyond the three-year level;
2. Children who are partially or severely deaf to whom speech sounds are unintelligible;
3. Young children whose parents anticipate all their wants;
4. Children who have had an extremely severe emotional experience or accident;
5. Spastic or cerebral palsied children whose nervous system is faulty;

In a particular case of absence of speech responses, one factor may be given excessive prominence in the plans for remedial teaching. It is likely that the causes are multiple instead of single.

The idea that delayed speech is a certain sign of intellectual backwardness must be discarded until physical, social and emotional handicaps have been eliminated as possible causes.

Refusal to speak in school or to strangers is a symptom which must have an underlying cause. Each case must be studied individually to diagnose the difficulty. Diagnosis must be followed by a planned remedial programme. All possible evidence should be collected and examined before a tentative solution is planned.

Courses for the Handicapped No.1.

Prepared by Mrs. Jean Muller,
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SUGGESTIONS FOR SCRAPBOOKS

ON

GOOD HOUSEKEEPING

Ontario Department of Education,
April 1946 - 500 copies.

Purpose.

The scrapbook is planned for the girl who needs some guide to housekeeping whether it is her own home or the home of an employer. The scrapbook is to contain pictures of attractive houses and rooms set with modern furniture, fixtures, dishes and ornaments or surroundings.

One of the reasons for selecting pictures from the magazines for a place in the scrapbook is that a girl learns to recognize the articles used in the rooms of a modern home whether the shape or colour is familiar or not. Since many of the girls will come from bare homes, and may be employed in homes which have furnishings dishes and utensils that are novel, the scrapbook helps her to adjust.

These scrapbooks have been prepared for a number of years and have become the treasured possessions of their owners.

Organization.

Pictures of attractive houses are mounted on both sides of white sheets of 8½" x 14" paper, labelled explaining the view. This is followed by pictures of each type of room and notes are written in describing the furniture, with directions for daily and weekly care. Several attractive pictures of each room are given.

Sample of notes which have appeared in the girls' scrapbook are included.

The order in which they are presented is as follows:-

(1) Home
(2) Living Room.
(3) Dining Room - Centre pieces, flower settings, table settings, menus, holiday menus, table manners table service.
(4) Hall and Telephones.
(5) Kitchen - Icebox, sink and its care, washing glassware, dishwashing, care of garbage, washing linoleum, care kitchen and cupboards, how to build a fire in a stove or furnace
(6) The bathroom.
(7) Bedroom - How to make a bed, cleaning windows.
(8) Helpful Hints.
(9) The Recreation Room.

Notes are made on appropriate pages facing suitable pictures. Occasionally a clipping containing some hint on housekeeping can be included. The greatest portion of the text of this pamphlet is devoted to the notes which would ordinarily appear.

The illustrations may be cut from the magazines and each pupil should have quite a selection of views of each room as well as illustrations of table settings and of ideas in household interior economy.

A Home Needs

1. A good site - sunny - clean - dry - pleasant locality.
2. Protection - a fire insurance policy.
3. Location near a good school and church.
4. Nice people as neighbours.

Good Habits In The Home

Children can be trained to obey family rules that make for order and happiness in the home. They can be trained to be unselfish, to do their share of the work and to play pleasantly together.

Good Habits

1. Regular time for retiring and rising.
2. Eat proper food.
3. Read only good books.
4. Have good personal habits (bathing, cleaning teeth, nails and hair).
5. Change clothes often.
6. Clean and press dresses, coats and polish shoes.
7. Go with suitable companions.

Co-Operation In The Home

A knowledge of customs helps us to know how to act and make it easier to get along with other people.

Customs are helpful in the home and co-operation among members of the family makes the home a happy one.

How Members of the Family May Co-operate

1. By keeping the house clean and tidy.
2. By being on time for meals.
3. By going to bed at the right time.
4. By being thoughtful of each other.

Members of the Family Help Each Other

1. By placing pad and pencil by the telephone.
2. By planting bulbs to bloom for Easter and Christmas.
3. Putting up individual racks in the bathroom for towels.
4. Making a cover for the radiator to protect the walls.
5. Planting and caring for window boxes.
6. Hanging a mirror inside closet door used for hats and coats.
7. Listing family information such as birthdays, anniversaries, addresses, etc., in a book.
8. Making a recipe book of favourite family dishes.
9. Pasting oilcloth in drawers and cupboards.
10. Making a collection of suitably shaped cans for holding things on a kitchen shelf. The cans should be painted and lettered to show what they hold.

A Home Should Be Kept Clean - Cleanliness Is Next To Godliness

Cleanliness is necessary to good health. Scrubbing, scouring, sweeping and dusting pays dividends in the form of good health. Never allow dust to collect, especially under beds because germs breed there.

Garbage should be emptied daily. It should be burned or buried if it is not collected.

The sink should be kept clean. It should be flushed daily with hot water and soap. Ammonia should be used often.

Use plenty of hot water, soap and elbow grease in scrubbing and cleaning.

Play In The Home

Play is a way of enjoying yourself. It gives a family or a group of friends a pleasant hour or evening together if games suited to the living room are chosen.

Checkers, crokinole, Chinese checkers, card games, jig-saw puzzles, etc., will give pleasure to all.

After games are finished, put them away in a place kept for the purpose. Tidy the living-room by putting the chairs in place and removing the card tables.

Hobbies

Hobbies are especially useful. They give pleasure and often result in a way of earning some extra money.

Scrapbooks, snapshot albums, knitting, crocheting, making doll's clothes, plaster of Paris plaques, painting, making paper flowers, coat ornaments, collections (Buttons, china, stamps, flags, dolls, etc.) are suitable hobbies.

The Living Room

Furniture - Chesterfield Suite - 2 chairs, couch.
Occasional chairs
Small tables for lamps
Book cases
Good Pictures
Radio
Coffee table
Footstool.

Daily Care- Sweeping and dusting
Use carpet sweeper if necessary
Put books, cushion and other things in place.

Weekly Care - A good cleaning

1. Move furniture, as much as possible
2. Cover immovable furniture
3. Open the windows
4. Take down pictures (they make marks on the walls)
5. Sweep first if a broom is used ....
   Sweep last if a vacuum cleaner is used
6. Dust pictures and mirrors with a soft cloth
   (Don't forget the backs)
7. Use a cloth free from lint for dusting the furniture
8. Take books from the shelf and dust well with a soft brush.
9. Clean and wax floor.
10. Last of all, use the vacuum cleaner on the rug.

N.B. Put all dust cloths with the laundry to be washed. Shake dust mop clean and wash it occasionally. Clean the broom and wash the dust pan with hot water.

The Dining-room

Furniture - Table, 6 chairs, buffet, china-cabinet, very few pictures.

Linen - 3 table cloths, silence cloth, 1 dozen linen serviettes centre pieces.

Dishes - 1 set of dinner dishes, 8 glasses, dessert dishes.

Silverware - Knives, forks, spoons, salad forks, carving set.

Daily Care - Fold table cloth and serviettes in creases and place in drawer in buffet. Sweep rug and after each meal put furniture in place.

Weekly Care - Clean and polish furniture and floor. Take dishes off the buffet, wash and replace. Clean silverware if necessary also glassware. Keep fresh flowers on table when in season. Put soiled linen in laundry.

Table Service - All linen, dishes, glasses and silverware should be spotlessly clean.
A low centre-piece of flowers makes the table attractive.
Table should be correctly set, all "covers" being exactly alike
Color in food whets the appetite and pleases the eye - carrots, peas, radish.
Members of the family should learn to serve and wait on table quietly and skilfully.

Laying the Table

1. Place a silence cloth (felt, flannel).
2. Spread the table cloth smoothly and evenly with centre of table
3. If table mats are used place with edges parallel to table.
4. Arrange centre piece (not too high)
5. Place silverware in order of use. First - farthest from plate.
6. Place knives with sharp edge towards plate - spoons to right of knives - forks, tines up, at left of plate.
7. Water glass at tip of knife.
8. Bread and butter plate at left of plate, above serviette.
9. Salt and pepper at corner of table or between two places.
10. Place dishes to be served directly in front of one who serves with table spoons, etc. beside dishes.
11. Place a chair for each person at edge of table.

Points to Remember in Serving

1. Never grasp a glass by the top.
2. Hold a plate by the edge - never allow the thumb over the rim of a plate or soup plate.
3. Pass a pitcher with handle towards the person who is taking it.
4. Remove dishes one at a time - never pile them at the table. Do this quietly and never allow silver to drop.
5. Clear the table of crumbs with a napkin and plate.
6. In serving one should show a sense of daintiness, a quick eye and an understanding of good table manners.

Table Manners

Use knife for cutting and spreading. (Don't cut your mouth).
When not using knife place across plate to the right.
Do not cut up allthe food at one time.
It is mannerly to cut meat and eat it slowly.
The fork may be used in either hand.
If a second helping is desired, leave knife and fork on plate to the right (Don't hold them in your hand.)
Use a fork for salads and ice cream.
Use a spoon for soft food.
Break off and butter bread - never butter the whole slice.
Never speak with food in your mouth.
Loud laughing at table is not good taste.
Lastly - Keep elbows close to the side when eating. Your neighbour will appreciate it.

N.B. A person who eats quietly never offends - regardless of which knife, fork or spoon is used.

Serving

1. Have everything ready before announcing dinner.
2. Fill water glasses 2/3 full the last thing.
3. Announce the meal.
4. Pass - serve and place everything from the left with the left hand except beverages and extra silver.
5. Serve hostess first and continue around the table from the right
6. When carrying hot dishes rest them on a folded napkin in the right hand.
7. Remove serving dishes first and then individual dishes. Take your time and move quietly; it prevents accidents.
8. Remove the salt and pepper and the silver not needed on a tray.
9. With folded napkin brush crumbs on to a plate.
10. Place beverages in front of hostess (tea or coffee).
11. Serve dessert from the left.
12. Stand by the hostess ready to serve the beverage. After this is completed your services are at an end in the dining-room.

Thanksgiving Dinner

Table Decoration - white smooth table cloth - glassware - Silverware. Centre pieces - fruit - plenty of colour. Paper serviettes in fancy colours.

Menu - First Course - Apple Juice.
Relishes - Pickles, celery, sliced tomatoes.
Main Course - Turkey, cranberry sauce, potatoes (creamed), turnips.
Dessert - Pumpkin Pie.

Follow this with menus for Christmas, New Year's and other special dinners including suitable decorations. Pictures are helpful and interesting.

Caps and aprons of coloured crepe paper suitable for the occasion are attractive.

E.G. A red cardboard heart makes a cap. White crepe paper cut heart shaped with white ties makes an apron for a Valentine Tea. Similarly a cardboard Shamrock hat with green apron cut to pattern is attractive for St. Patrick's Day.
If afternoon tea is served in your school the girls take much enjoyment out of decorating the table and serving, in cap and apron. You may discover talent for designing among the girls in this way.

The Kitchen

I think there's nothing nicer
Any day or minute
Than a cozy little kitchen
With a tidy woman in it.

Equipment - Stove, cupboards, refrigerator, table.

Cooking Utensils - Pots, pans, dishes, knives, forks, mixing spoons, rolling pin.

Cleaning Utensils - Mop, brooms vacuum cleaner, pails, dust cloths, polishing cloth, cleanser, wax, oil.

The kitchen should be the cleanest room in the house as food is cooked there. All equipment should be well cared for, organized and everything kept in its place.

The kitchen should be cheery with gay curtains, plants and plenty of colour. The cook should wear a hair net or some such covering.

Work in the Kitchen

A moment is a little thing
But moments make the day
So crowd it with a worthy task
Before it slips away

1. Preparation for Dishwashing.

1. Put food away - the cream and butter first.
2. Scrape plates and stack.
3. Fill salt and pepper shakers and the sugar bowl.
4. Use suitable containers for storing food.
5. Put all glassware together.
6. Place flat silver in pitcher with warm suds.
7. With soft paper wipe out sticky or greasy dishes.
8. Stack dishes that are alike.

N.B. This means quicker work - less chipping of dishes and much less noise

2. TO CLEAN GLASSES

1. Use hot soapy water. (Rinse off milk in cold water first)
2. Rinse in clear hot water.
3. Use several clean towels (non-linty) for wiping.
4. Turn upside down on the rack to dry.
5. A few drops of ammonia will make glasses shine.

3. Dishwashing
1. Use hot water and soap for washing.
2. Wash silverware and glasses first.
3. Wash the cleanest dishes.
4. Rinse with very hot water.
5. Change dish water several times if dishes are greasy.
6. Wash kitchen cutlery (scour if necessary).
7. Wash cooking dishes and utensils.
8. Wash towels, dish cloths and hang up to dry.
9. Clean sink. (Never leave crumbs as they invite vermin.)

To Clean Sinks

1. Keep sinks clear of food scraps and grease (both invite plumbers.)
2. After dishwashing, flood the sink with very hot water.
3. Washing soda cuts grease. Be careful not to use much water.
4. Use a mild abrasive to clean sink (Dutch Cleanser or Bon Ami.
5. Polish the taps.

N.B. Grease in sink pipes causes odours and invites vermin. A small plunger is the housekeeper's friend.

To Wash Cooking pots, pans and dishes.

Cold Soak dishes in which eggs, meats, cheese, fish or doughs have been mixed or cooked because these foods harden when heated.
Hot Soak dishes which have been used for sugar, syrup or candy because sugars dissolve quickly in hot water.
Hot soda soak dishes in which there has been grease, gravies, roasts because soda makes soap with the grease and therefore cleans.
N.B. Aluminum pans are soaked without soda and cleaned by scouring with steel wool.

To Wash Dish Cloths and Towels - which are used only for washing dishes.

1. Soak in cool soapy water to loosen stains.
2. Wash in hot soapy water.
3. Rinse twice in clear hot water.
4. Rinse in cold water.
5. Wring out.
6. Stretch and hang them to dry.

N.B. Do this every day.

Care of Garbage and Garbage Can

1. Use large paper bags in can to hold garbage.
2. Drain tea leaves, parings, etc. dry before putting them in the can. (Use sink strainer.).
3. If garbage is not collected dig a deep hole for the garbage covering each day's garbage with earth.
4. Rinse out all the tin cans.
5. Wash garbage can with hot water and soap. Rinse well and place outside to dry.

N.B. There is no excuse for a smelly garbage can.

To Clean Silver

1. Use soft cloths and silver polish.
2. Wash with soap and water.
3. Rinse in very hot water and wipe dry while hot.
4. Polish with a dry cloth.

N.B. Too much silver in the dishpan at one time causes scratches.

Pan Method.

One quart of boiling water in a pan on the stove. Put in as much silver as the water will cover. Measure one tablespoon of salt and one tablespoon of soda and shake into water containing the silver. Allow silver to stand in water until bright. Then wash in hot soapy water. Rinse in hot water and polish with a dry cloth.

To Open a Clogged Waste Pipe.

Drains from the kitchen sink may become clogged with grease. Drains from basins or bathtub may be clogged with hair or lint.

1. Boiling water cuts grease.
2. Wire may be used to push or loosen hair.
3. A rubber suction cup is a cheap and useful tool.
4. Baking Soda in hot water may be used. (Never use washing soda.)

To Mend a Leaky Tap.

1. Shut off the water.
2. Unscrew the big nut of the tap with a monkey wrench.
3. Draw out the handle screw.
4. Loosen screw holding washer and pry off the old washer with a screw driver.
5. Put on a new washer.
6. Replace handle screw.
7. Open water system.

The Bath Room.

Furniture Basin bathtub, toilet, medicine cabinet, towel rods, bath-mat, cover for lid of the toilet.

Daily Care After you have used the basin or tub be sure to clean them carefully after draining. The towel and wash cloth should be hung up neatly to improve the appearance of the bathroom.

Be sure to flush the toilet after using. Use chloride of lime or saniflush to keep the toilet bowl clean.

The bathroom of nice people is always clean and tidy. Brushes and tubes, razor blades, combs and brushes do not litter the top of the toilet box.

Occasional Care - the bathroom needs a general cleaning once and perhaps twice a week. Washing with soap and water is the best method. Sweep the floor first, cleaning the corners well. Clean the basin and tub by first using a cleaning powder, followed by soap and water. Clean the mirror and window, polishing them well. Scrub the floor last and hang up clean towels.

Cleaning the Bathtub - Scrub with a soft brush which has been moistened with a little water and using some cleanser such as Old Dutch, D.B., Babo. Rinse thoroughly with hot water to remove all cleanser. Wipe Dry.

Hard water may leave a scum. Kerosene will remove it.

Soapy water removes the odour of kerosene.
Using a fine cleaner, polish metal taps.

Cleaning the Toilet - Daily care is necessary.

1. Always flush the toilet after it is used.
2. Put no heavy paper or cloths down the drain.
3. A string dish cloth with strings cut short should be kept for this purpose only if a toilet brush is not used.
4. Use soap and hot water for cleaning.
5. Disinfect once or twice a week with chloride of lime.
6. Clean mop and brush.
7. Wash bath mat often.

The Bedroom

Furniture - Bed, dresser, vanity dresser, chest of drawers, chair, lamp, bed lamp.

Bedding - Mattress, cover, sheets, pillow cases, blankets, bed spread, Dainty window curtains.

Daily care - Air the bed after you get up. Make the bed - tidy tidy the dresser, hang up night clothes - dustli lightly with the mop.

Weekly care - Put bedding outside to air. Brush mattress with a whisk and turn. Wash windows. Clean the pictures and floors. Make the bed with clean linen, Clean dresser drawers and put clean scarf on the dresser. Dust everything well.

Helpful Hints

To Ventilate a Room

1. Have the hot air going out the top.
2. Have the cold air coming in at the bottom.
3. Two windows hasten ventilation.
4. Air circulation need not make a draught.
5. One window down at the top and another window up at the bottom.

To Make Dustless Dusters

1. Cut cheesecloth to size you need.
2. Prepare this mixture:
   1 pint very hot water, ¼ cup of lemon oil.
3. Stir the oil and water well.
4. Press 4 or 5 pieces of cloth into the mixture and work the oil and water into the dust cloth.
5. Squeeze dry and hang up to dry.

N. B. It pays to hem dust cloths.

To Make a Fire in a Stove or Furnace

1. Put crushed paper or wood shavings on the grate
2. Lay on pieces of kindling as from old boxes.
3. Put on heavier wood laid criss-cross.
4. If coal is used put 2 or 3 shovels of fresh coal on the wood. open the dampers at the bottom of the grate and the one in the chimney.
5. Light the fire from under the paper
6. Close the lower damper when the coal is red..
7. Close chimney damper to heat the oven or the house

N.B. Never! Never! Never! use coal oil to start the fire because it may explode in the stove.

How to Save Coal

1. Draw the window shades.
2. Keep your bedroom door closed.
3. Reduce daytime temperature to 68 degrees.
4. Close outside door promptly.
5. Put weather-stripping around the outside doors.
6. Clean ashes - stove day, furnace weekly.
7. Learn to fire furnace properly.

Ask your dealer for a booklet called "33 ways to save one ton in five."

Causes of Fires.

1. Chimneys without a flue lining.
2. Rubbish in the attic.
3. No fire stops.
4. Soot in the chimney.
5. Aerial not properly grounded.
6. A shingle roof.
7. Electric iron left attached.
8. Improper wiring of houses.
9. Gasoline kept inside the house.
10. Rubbish in the cellar.
11. Wooden barrels for ashes.
12. Wet clothes hung on electric wire.
13. Kerosene (coal oil) used to light fire.
14. Stove pipes near the wall.
15. Matches within reach of children.
16. Oily rags not kept in metal container.
17. Cigarette stubs not extinguished.

To Wash Cotton Clothes

Divide soiled clothes into groups

(1) Slightlty soiled - table linen, doilies and scarfs.
(2) Body soiled - pillow cases, spreads, light underwear, bath towels.
(3) Coloured clothes - cottons and linens.
N.B. Tea towels are washed separately.

Soak the clothes overnight in cold water and for 20 minutes in hot water. Use powdered soap in a power washer. Use bar soap on dirty parts like the neck of shirts before putting into the washer. Give special attention to hems, under- arms, neck and cuffs of garments

Rinse 3 times - (2 hot, 1 cold), bluing if needed.

N.B. Soap and water must displace dirt by their dissolving powers and rubbing.

To Make Starch

Use a clean enamel pan and a wooden spoon.
Measure 3 tablespoons starch.
Mix with one cup cold water
Stir into 3 cups of boiling water.
Cook about 5 minutes, stirring carefully. (It should be a clear watery colour).
Strain and use when cool.
N.B. Starch will be lumpy if it is not stirred.

A Clipping of Helpful Hints.

To make small scatter rugs nonskid use special linings or anchors under them - rubber if it is still available, or cork or felt. Another method is to stitch used, but clean, fruit jar rings to the underside of rugs. In waxing floors use thin wax coatings andpolish thoroughly unless it is self polishing wax, so as the floor won't be so sippery or instead of wax, use new less-stick floor finishes. Move rugs with curled-up edges so turned up sections do not come in the doorways.

Too Salty

1. When soup is too salty use a grated potato or sugar to suit the taste.
2. When pans or dishes smell of onion, use a slice of lemon in the dishwater, or a little vinegar.
3. When house ferns turn yellow, slice a raw potato and put it on top of the soil. This may attract the worms
4. In case of poisoning, a strong solution of salt in water (1 teaspoon in a glass of warm water) acts as an emetic and makes the patient vomit.
5. A salt rub while having a bath refreshes you very much
6. Soak nuts in salt water overnight and they will crack more easily.
7. A little salt on a cloth will take the frost off windows it is applied to.
8. Salt and turpentine will clean white enamel dishes and wash tubs.
9. Wax the feet of furniture to prevent scratching of floors.
10. Ink stains may be removed if cold water is applied immediately to fabric..
11. Remember greasy pans are easily washed if soaked in water and baking soda.

Helpful Hints

If Dresser Drawers stick rub the edge with a little vaseline or a cake of soap.
"Rads" won't get hot - try letting the air out of them.
When Doors squeak - with a screw driver lift the hinge pin a quarter of an inch or so. Then annoint the pin with a drop or two of oil. Tap into place with a hammer.
When Ironing cord is frayed - Unless bare wires are exposed - mend with insulating tape. If wires are exposed take to an electrician without delay.
Never touch an electric appliance with wet hands. It has meant death to many - especially an electric heater in the bathroom.
Never use chairs, boxes etc. when necessary to reach high objects. A step ladder will save broken bones.
To Sweep Hardwood Floors. Use a long handled hair broom. Take up dust on dustpan. Finally dust with a bag on the broom or dust mop.
N.B. Frequent waxing and hard rubbing keep a floor in perfect condition.
To Open Fruit Jars. Stand jar upside down in hot water. Heat expands the metal top. Leave longer if the top is glass.
N.B. Never use rubber rings a second year it is dangerous.
N.B. Do not use home canned vegetables or meat without boiling first Do not neglect this.
Enlarge this to contain notes on -
How to mend and care for Hot Water Bag. Electric appliances, Vacuum cleaner, etc. also care and dusting of Books, Care of plants etc.
To Remove Grass Stains Remove by rubbing kerosene (coil oil) on the stain. Wash with warm water and soap.
N.B. Always remove stain before washing. Grass stains once set cannot be removed.
To Remove Rust Stains. Use lemon juice and salt. Then wash with warm water and soap.
The Play or Recreation Room. This room is in the basement. Yours may have possibilities. A little work could transform it into a play house. Clean the cement floor well, then paint it. Red is a cheerful colour and brightens up the room. Now the furnishings - Grandmother may have some chairs or a large table she will gladly donate. Aunt Mary has an old gramaphone and perhaps Mother's attic may yield a few useful articles. Paint these in attractive colours. Let your friends help you decorate. The results will pay you for any labour expended. You have now a place to rest or to play. Shelves may contain books, games, puzzles, hobbies, etc. Table Tennis and such games will liven up a rainy day. It will be a delightful spot in which to entertain friends or hold your Club Meetings.

Pamphlets on the Education of the Academically Handicapped No. 3
Prepared by C. E. Stothers, Inspector of Auxiliary Classes,
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TESTING ORAL READING

Acknowledgement is hereby made of the assistance of the following inspectors in administering tests on which much of the data are based.
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The Oral Reading Scale quoted in full in this pamphlet is used by permission.

Department of Education, Toronto, December 1946 - 500.

Purpose

The purpose of this pamphlet is to set forth a plan by which any teacher can test and record a pupil's performance in reading. This record will be useful to demonstrate whether or not the pupil has progressed and may also be used to diagnose pupil difficulties.

In Ontario there are two types of books in use in the schools. The authorized books are provided for every pupil either by the school board concerned or by the parent or guardian. The supplementary books are almost entirely provided by the school board.

The teacher interested in locating reasons for a pupil's non-success in reading does not need to use the specially-developed materials which are herein used to describe techniques of diagnosing reading. He may choose to use less formal material of his own selection. It is probable that the teacher will learn more by using reading matter selected by himself than if he purchases ready made tests.

Directions For Oral Reading Scale

This is a scheme whereby a record is obtained of a pupil's performance in oral reading. While the pupil reads the paragraphs, the examiner marks a duplicate copy to show the errors made by the pupil. The number of errors is used in assigning a grade in Oral Reading to the pupil. At some time convenient to the examiner, the test should be reviewed to sort out the pupil's errors and on that evidence to devise remedial measures if they are needed. The following directions should be read carefully and the examiner should practice its administration until he acquires facility in recording errors.

Instructions to the pupil

"You are to read one paragraph at a time. When you come to the end of a paragraph, you are not to go on to the next one until I tell you. Read this paragraph as well as you can". (Pointing to the paragraph on which you wish him to begin.)

Amount to be read by each pupil:

Each pupil should read not less than three sections or paragraphs. From the Table of Values, the examiner can ascertain the approximate place to commence reading a paragraph, t wo sections lower than his grading in school. The examination should be continued until the pupil finds the material much too difficult.

Where the pupil is a poor reader (no matter what his grade is in school) it is better to start at the first paragraph and continue through the test until you have a good selection of error types.

Pupils in Grade II should commence at Paragraph 1. Pupils of Grade III and IV may be st arted at Paragraph 2. This test is not intended for pupils of Grade I.

Recording

As the pupil reads, the examiner marks all errors according to the following schedule.

1. Omissions - Put a circle around a word, letter or part of a word omitted as in the example below:

John believes that the only really suitable

2. Refusals - Underline with a straight line each word on which the pupil delays five seconds. At the expiration of this five seconds, tell the pupil the word and let him go on. See the example below:

place to construct a rabbit house is in the

3. Repetitions - Underline with a wavy line words repeated by the pupil. See the example below:

orchard beside the meadow. - - - - He cannot

4. Substitutions - Draw a straight line through any miscalled or substituted word and write above it the substitution. See the example below:

find enough ~~rough~~ row boards anywhere ~~around~~ about

5. Additions or Insertions - Write in additions to words (This is a form of substitution). A caret should be placed at the point in the word where the substitution occurred. See the example below:

the cottage so he has plans to purchase lots some new

6. Accent - Indicate wrongly accented words of syllables with an upright stroke above them. See the example below:

lumber. - - - - Twenty-five cents in coppers and silver money will not buy any considerable amount of softwood lumber; therefore,

7. Pronunciation of Vowels - Indicate any errors in pronunciation of vowels by the customary signs for long and short vowels. See the example below:

able amount of sōftwood lumber; therefore,
he thinks he ōught to try to ûse orange crâtes

Scoring

The examiner will find the sentence in which the candidate's fourth error occurred and place a mark at the end of this sentence. Since some of the errors are not counted in scoring, it is well to put a mark in the margin indicating the error which is counted. In cases where the examination is shortened by omitting some preliminary paragraphs, the score is counted on the third error.

Each part of a paragraph read without error has a value of 2, 3 or 4 months. The paragraph parts are separated by four dashes.

In the Table of Values, the value is shown for the beginning and end of each paragraph. Intermediate values may be obtained by adding the number of months assigned to each sentence beyond the beginning of the paragraph in question. If the candidate's fourth error occurs in the last part of a paragraph, the grading is the value in Roman Numerals for the end of the paragraph.

Values such as V.0. and V.3 are to be considered low Grade V. A value like V.6 may be considered middle Grade V. Values like V.9 and VI.0 may be considered high Grade V.

Errors are counted as follows:

1. Single words omitted and single letters omitted are marked, but not counted as errors;

2. Every single word told the pupil after a delay of five seconds counts as one error;

3. Each word substituted is counted as one error (the substitution should be written above the word for which it is given). Substitutions for "a" and "the" are not counted against the pupil in the Junior Scale.

4. Every repetition of two or more successive words counts as $\frac{1}{2}$ error;

5. One mispronunciation need not be counted.

Table of Values

Paragraph Number	Grade in Oral Reading	Value for each sentence	Approximate Vocabulary	Average Time
1.	Primer to Grade I	2 months	Up to 500	20 seconds
2.	Grade I to " II	4 "	" " 1000	25 "
3.	" II " " II.6	2 "	" " 1500	30 "
4.	" II.6" " II.10	2 "	" " 2000	30 "
5.	"II.10" " III.4	2 "	" " 2500	50 "
6.	"III.4" " IV.0	2 "	" " 3500	50 "
7.	"IV.0 " " V.0	4 "	" " 4500	50 "
8.	" V.0 " " VI.0	3 "	" " 5500	55 "
9.	"VI.0 " " VII	3 "	" " 6500	50 "

History of the Test

It is patterned on a similar scale produced by John Duncan, Principal of Lankills Special School, Winchester, England. The words have been checked with the Gates Primary Reading List and the Thorndike List. Some 2,000 pupils have been tested, and the grading given to each paragraph is based on the fact that in several graded schools the test has placed the middle pupil in all classes from Grade I - Grade IX in their actual grade. The low pupils have been placed low in their grade or one grade lower, and the high pupils have been placed in their actual grade or one or more grades above.

Uses of the Test

1. Grading - The test is intended to give gradings within one-half year of the pupil's ability.

2. Diagnosis -
   (a) If the speed is very much slower, the examiner should look for a reason. For instance, if the candidate takes 50 seconds to read paragraph I - II, the examiner may check by having the pupil read the paragraph again to note whether or not the candidate sounds each word letter by letter. Where the reading vocabulary is low, as indicated by the number of words not known, the speed may be below that indicated in the tables. Repetitions of words and phrases may make the pupil take more time to read a paragraph. Pointing with the finger may be a symptom accompanying slow reading.
   (b) The quality and quantity of errors is important. These should be summarized for study. The summary should be a guide to the teacher on the types of error to be observed when the pupil is reading from a familiar book.

3. Notes should be made by the examiner on the record sheets during the test of such things as sounding single letters, pointing with finger, losing the place, etc.

Suggested Grading For Ontario Texts

Oral Reading Scale

Suggested Grading For Vocabulary-based Texts.

(FOR JUNIOR AND INTERMEDIATE GRADES)

NAME ..... BIRTHDAY ..... GRADE .....

DATE ..... 19..... SCHOOL ..... PLACE .....

0—I (2 mos.)

I see John and Mary.

John plays with his dog.

The dog runs after John.

Mary plays with the cat.

John calls his dog into the garden.

Mary calls her cat into the house.

PP - P (2 mos.)

TIME IN SECONDS .....

I—II (4 mos.)

Mary has a pretty little ball and John has a big red apple. - - - - John and Mary want to stay four days at the farm and to have a good time. - - - - One day they went all the way to the lake and had a long ride on the water.

P - I (4 mos.)

TIME IN SECONDS .....

II—II 6 (2 mos.)

Their pet dog likes to go to school with them every morning but now he has to stay at home. - - - - He cut his leg on a piece of broken glass so Mary has to tie it up often in clean cloth. - - - - John has to feed his white cat every day. It has red eyes, short hair, small ears and a long tail.

I - II (4 mos.)

TIME IN SECONDS .....

II 6—II 10
(2 mos.)

To-day John got a letter from his oldest brother. He says that he is coming home soon and wants to go camping for a holiday. - - - - John and Mary will get ready for this outing by gathering up fishing lines, string, rope, quilts and a box of canned goods.

II - II.8
(4 mos.)

TIME IN SECONDS.....

II 10—III 4
(2 mos.)

Walking home from school one day this week, Mary saw a brave but reckless young man run in front of an automobile to save a baby. - - - - The baby's mother was buying butter in the grocery store nearby and the thoughtless child ran off the sidewalk to chase a woolly dog. - - - - Immediately a crowd gathered around the child, the mother and the courageous young man, and an old gentleman expressed his opinion that this young fellow should be rewarded with a medal for life-saving.

II.8 - III.8
(4 mos.)

TIME IN SECONDS.....

III 4—IV 8
(2 mos.)

John believes that the only really suitable place to construct a rabbit house is in the orchard beside the meadow. - - - - He cannot find enough rough boards anywhere around the cottage so he plans to purchase some new lumber. - - - - Twenty-five cents in coppers and silver money will not buy any considerable amount of softwood lumber; therefore, he thinks he ought to try to use orange crates instead. - - - - Generally he gets wooden crates at the fruit store but sometimes they have only cardboard or paper boxes.

III.8 - IV.0
(4 mos.)

TIME IN SECONDS.....

IV—V
(4 mos.)

It was quite late in the autumn season when Uncle John took charge of a flock of sheep to drive them to new pastures many miles westward of their usual range. - - - - Frequently they passed cabins but nothing happened for days; uncle with his procession of sheep, wandered along dusty roads, waded shallow streams or rested in the shelter of the cottonwood trees. - - - - At night the sheep recuperated from the day's journey after feeding on grass and drinking at a convenient waterhole, but uncle had fitful slumbers as he had to wake regularly to check his flock and renew his fire.

V - VI
(4 mos.)

TIME IN SECONDS.....

V—VI
(3 mos.)

Aunt Mary told John and Mary that after the ship left the harbour on a dull Thursday morning, a huge rainbow was noticed across the eastern sky. - - - - An hour later black, threatening clouds blew up from the northeast, the sky darkened and heavy squally winds struck the schooner and tore the maintopsail. - - - - The captain could not navigate his ship back to port because of the direction of the wind. - - - - The shrieking of the storm, the crashing and muttering of thunder, the brilliant flashes of lightning and the shock of mountainous waves as they broke over the gunwales made everyone feel that the vessel would plunge to the bottom of the sea.

VI - VII
(3 mos.)

TIME IN SECONDS.....

VI—VII
(3 mos.)

Uncle John had lived on the frontier while a whole generation grew to maturity and he could tell remarkable stories which were not exaggerations. - - - - On one occasion it was perfectly obvious that the settlement would have to be defended from surprise attacks by neighbouring native war parties. - - - - The settlers built a high wall of earth, massive tree trunks, boulders and stakes around the circle of cabins, warehouses, root cellars and other structures. - - - - When these fortifications were completed the cattle were herded inside daily, the grain was harvested, the fodder stored and a water supply established.

VII - VIII
(3 mos.)

TIME IN SECONDS.....

Samples of Reading Records of Pupils

Stuttering - The form can be used to record stuttering. An upright line indicates pauses; a check mark indicates repetition of a letter; a wavy line shows repetition of a word or phrase. Lack of rhythm in reading is characteristic of stuttering.

(4 mos.)

It was quite late/ in the autumn season/ when Uncle John/ took charge/ of a flock of sheep/ to drive them/ to new pastures/ many miles westward/ of their usual range./ - - - - Frequently/ they passed cabins/ but nothing happened for days;/ uncle/ ~~with~~ and his procession of sheep/ ~~wandered~~ waddled along dusty roads/ waded shallow streams/ or rested in the/ shelter of the cottonwood trees/ - - - - At night the sheep/ recuperated/ from the day's journey/ after feeding on/ grass/ and drinking at a/ convenient/ waterhole/ but uncle had/ fitful/ slumbers/ as he had to wake/ regularly to check his flock and renew his fire./

TIME IN SECONDS 75

Substitutions and Omissions - This record is that of a boy in Grade V. He can read slowly and inaccurately in Treasury VI Reader and the Atlantic Reader V. With his intelligence he would be expected to read accurately and fluently in Grade VII. The errors are mostly in word endings. His comprehension level was approximately that of a Grade IV pupil.

I—II 6
(2 mos.)

Their pet dog likes to go to school with ~~them~~ him every morning but ~~now~~ when he ~~has~~ had to stay at home. - - - - He cut his ~~leg~~ long on a piece of broken glass so Mary has to tie it up often in clean ~~cloth~~ cotton. - - - - John ~~has~~ had to feed his white rat every day. It ~~has~~ had red eyes, short hair, small ears and ~~a~~ a long tail.

TIME IN SECONDS 55

Deafness or Hard-of-Hearing - Note that he omits endings and some specific sounds.

II 6—II 10
(2 mos.)

To-day John got a letter from his oldest brother. He says that he is coming home soon and wants to go camping for a holiday. - - - - John and Mary will get ready for this outing by gathering up fishing lines, string, rope, quilts and a box of canned goods

TIME IN SECONDS 38

Speech Defect - The record shows omission and substitution for the letter "r".

II 10—III 4
(2 mos.)

Walking home from school one day this week, Mary saw a brave but reckless young man run in front of an automobile to save a baby. - - - - The baby's mother was buying butter in the grocery store nearby and the thoughtless child ran off the sidewalk to chase a woolly dog. - - - - Immediately a crowd gathered around the child, the mother and the courageous young man, and an old gentleman expressed his opinion that this young fellow should be rewarded with a medal for life-saving.

TIME IN SECONDS 34

Single Letter Phonics - The time taken to read this passage is very much in excess of the average. This boy was in Grade II. He sounded single letters and does not blend them successfully. He seemed to call words from recognized parts. He most frequently recognizes the first part of the word and has mistakes in the endings.

II 6—II 10
(2 mos.)

To-day John ~~got~~ get a letter ~~from~~ for his ~~oldest~~ brother. He says that he is coming home soon and wants to ~~go~~ get camping for a holiday. - - - - John and ~~Mary~~ may will get ready for this outing by gathering up fishing lines, string, ~~rope~~ prop, ~~quilts~~ quit and a box ~~of~~ for canned goods.

TIME IN SECONDS 152

Line Skipping - This may be carelessness. It might be evidence of poor muscular control of the eyes. The omitted line was necessary to the sense of the passage, yet this pupil went right on.

II—II 6
(2 mos.)

Their pet dog likes to go to school with them every morning but ~~now~~ how he has to stay at home. - - - - He cut his leg on a piece of broken glass so Mary has to tie it up often in clean cloth. - - - - John has to feed his white rat every day. It has red eyes, short ~~hair~~ hall, ~~small~~ shall ears and a ~~long tail~~ nose pads.

TIME IN SECONDS 30

REMEDIAL READING

A Round Table Discussion

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Panel:

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REMEDIAL READING

A - Introduction

1. The Place of Remedial Reading

Remedial Reading is concerned with providing an individual programme for the learner who fails to progress in reading at the rate and in the ways expected by his teachers and parents. The learner is at his most adaptable stage in life but because of individual differences appears not to profit by instruction in a large group which is proceeding at an average rate.

Frustration in reading causes heartbreaks and spiritual defeat when the teaching is not productive of learning by the child. A 9 year old girl on the completion of a formal test in Oral Reading said tearfully, "Did I read well enough to pass this year? I failed last year." Social pressure and frustration were grinding her down. When two Grade 3 pupils were examined, they showed normal intelligence but a Grade I ability in reading. The teacher was informed and being exasperated by the information snapped out, "How can they be ? They can't read."

The teacher who undertakes remedial teaching of reading accepts the problems of diagnosis, re-orientation and readjustment and principally the removal of emotional effects which can be as brutal by their frustrating results as the ancient punishments by the thumb-screw and the lash. Our group has undertaken to discuss the subject from the viewpoints of both the elementary and the secondary school.

2. Remedial Teaching

The general method of all Remedial Teaching may be stated concisely in the words of Professor Chung Pen Cheng as follows:

1. Look for the fringe of dissatisfaction;
2. Conduct a survey;
3. Liberate inventiveness.

We are agreed in this group that Remedial Teaching of any kind is concerned with PREVENTION, CORRECTION AND COMPENSATION for bad habits, errors, lacks and all handicaps.

3. The General Plan Of Instruction In Auxiliary Education

In the 30 or more years of the existence of special classes in Ontario for the academically and physically handicapped and the gifted, teachers have developed the following guide to teaching.

(a) By formal and informal methods and tests secure data on each child's intellectual, social, physiological, emotional and achievement levels;
(b) Begin instruction using methods and materials which have not been associated with the child's failure;
(c) Continue instruction at the pupil's individual rate to his capacity or to possible levels of achievement;
(d) To compensate for previous failure and to provide at least one avenue of success introduce suitable activities.

4. Diagnosis in Reading - (a) Recognition of Symptoms

The "fringe of dissatisfaction" in reading is shown by symptoms which are an outward sign of the underlying cause. The teacher must be ready to note symptoms such as the following:

(a) Bad Reading Habits
- (i) Lip movements;
- (ii) Head movements;
- (iii) Vocalization;
- (iv) Finger pointing.

(b) Reading Errors
- (i) Word and letter substitutions;
- (ii) Omissions of letters, words or lines;
- (iii) Repetitions of words or phrases;
- (iv) Insertions of words or syllables;
- (v) Frustration in recognizing words.

(c) Reading Lacks or Disabilities
- (i) Inability to analyze or synthesize sounds;
- (ii) Inability to syllabicate;
- (iii) Inability to grasp the meaning of words;
- (iv) Inability to remember or select details;
- (v) Inability to grasp the situation;
- (vi) Inability in giving the meaning of words;
- (vii) Inability to use words;
- (viii) Disability in getting the meaning of a sentence;
- (ix) Disability in grasping the general sense of a paragraph;
- (x) Difficulty with abbreviations.

(d) Reading Handicaps
- (i) Hold-over habits from the beginning grades;
- (ii) Speech defects;
- (iii) Hearing defects;
- (iv) Maturation as readiness or vocabulary development;
- (v) Visual defects;
- (vi) Cerebral Palsy;
- (vii) Emotional conditions;
- (viii) Unsuitable reading materials;
- (ix) A foreign language;
- (x) Academic abilities.

Diagnosis In Reading (b) Testing

After the teacher has noted "dissatisfaction" either at the fringe or after it is well established, the next step is to make the "survey". This is done to secure exact information on the extent of the symptoms and implies a standard from which there are some evident deviations.

The tests may be informal such as in the situation where the teacher tries out the child in several different reading situations. Out of the teacher's knowledge and experience, a programme is set up and remedial instruction is begun. Where the teacher makes a record of the bad habits, errors, disabilities and handicaps the diagnosis is apt to be better and the teacher is better prepared to use the more formal tests.

The group silent reading tests in use to-day are simply words, sentences and paragraphs which have been selected by experienced teachers and test-makers and which have been found to be suitable samples to grade the vocabulary, interest level and capacities of pupils. These tests have been graded by administering them to a large number of pupils over a wide area. Their performance has been used to establish grade and age levels. If the directions are followed accurately the results you get will allow you to compare your class or an individual in your class with the average pupil of the group originally tested. The achievement level in each part of the test may show particular remedial needs.

Oral Reading tests are individually administered. With a printed record form it is relatively easy to record the exact individual difficulties of a pupil.

For visual and hearing handicaps, the tests should be made by a medical doctor. The teacher may help the doctor by observing the symptoms of deafness and visual defect so suggested in the check lists given in Betts - "Foundations of Reading Instruction" pp. . (This illustrates the difference between medical and educational diagnosis but indicates that both are necessary).

For Speech Defects, the teacher may call on the services of a Speech Correctionist where she is available or record her own observations.

Information on social development or emotional conditions must be sought in the school, the home and the playground. If a social worker is not available, the teacher or principal might try it personally.

Data on ability to learn may be secured by group intelligence tests. Where the services of a psychologist, or an auxiliary class teacher are available an individual intelligence test record may be secured.

Diagnosis In Reading (c) Relation of Symptoms and Levels to Remedial Teaching

These errors, bad habits, handicaps, lacks and disabilities have their origin in the child's total experience with reading. Since it is possible that all, and probable that several of these reading entities are involved in a single case of reading difficulty, it behooves us as teachers to be aware of the following sources which are productive of the symptoms of failure:

(a) Pedagogy - all teaching methods, techniques, psychologies and philosophies;
(b) Materials - books, charts, pictures, diagrams;
(c) Home Background and Social Development;
(d) Physiological Development and Physical Handicaps;
(e) Mental and Emotional Maturity.

5. Remedial Work

Having assessed the symptoms, achievement levels and the child's experience, the teacher attempts to locate the causes and invent a programme of correction. If the symptoms are noted in their very earliest stage, (at the "fringe of dissatisfaction") this type of instruction would be called prevention. Where the cause is found to be of physical, social or emotional origin the remedial teaching would be to compensate for these.

The remedial work can now be left to an artistic teacher whose inventiveness can be liberated by the facts of the survey. All that is necessary now is time, material and the expenditure of directed effort.

It is suggested that the remedial teacher accept as a basic fact that the pupil has acquired these particular bad habits, errors, disabilities and even some of his handicaps possibly as unintentional results from his teaching. The first thing to do is to attempt to change his failure in one thing to success and extend this,gradually eliminate failures in other things.

The requirement of beginning instruction at the pupil's level means that the teacher must know well the books available and must choose accurately one which will suit this child. A wide knowledge of and experience with the available books is necessary. The Department of Educational Research has a pamphlet - Educational Research Series No. 7 - Bibliographies For Teachers - Reading which is helpful to the teacher in acquainting himself with books.

Since it is wise to instroduce the new book and a new method at the same time, the teacher must b e a master of all methods. (see Betts - "Foundations of Reading Instruction," and Durrell,"Improvement of Basic Reading Abilities" for a description of method.)

Familiarity with method should extend to the point where the remedial teacher knows the kind of difficulties which are attributable to method as applied by an inartistic teacher, or which in association with other factors would present hurdles to the child.

In carrying out remedial reading, it is not necessary to await the visit of a principal, supervisor, inspector or superintendent to assess the progress. Tests of reading should be given during the term to check the progress. This evidence can then be used to supplement any practical demonstration when visitors or senior officials come to visit.

The standards are conditioned by the ability of the pupil, his previous attainment levels and his rate of learning if physical, emotional and social difficulties have been resolved.

6. Individual or Group Remedial Teaching

The experience of the discussants has been with both individuals and groups. It has been found that individual instruction is possible in small groups of 3 - 5 pupils where they are all at the same level. This is the usual organization in tutorial and opportunity classes.

Individual teaching is done in the very difficult cases with outstanding success. There is however a lack of clinical facilities to provide the study of the most stubborn cases of reading disability.

B - Prevention of Errors - Miss Elsie Smith

"Beginning is half the thing."
"Prevention is better than cure."

It may be argued that Reading Difficulties create themselves but I am interested in what came before the reading difficulty -- what did or did not take place? Primary reading troubles do not come suddenly. Each has a history with causes and results.

The First Days In The Class

In September a group of 35 or more pupils enter new surroundings. These pupils react in the same way as anyone who goes into a strange place for the first time. They "fuss" about to make themselves comfortable; they stare at the hangings, pictures, furniture and other occupants; and they do these things under a much greater strain. For this reason the first week or more should be given to orienting the child to the classroom and his classmates.

Children like adults do not always make new friends readily. First impressions of the new teacher must be such as to make the child want her for a friend. The teacher must gain each child's confidence and make observations which are of the greatest value later in the term. It is important that we start with the pupil and not with the course of study.

General Observations The Teacher Should Make

During the Game Period, either in the room or outside, notice his activities
Which hand does he use? Which foot?
Notice his muscular control.
Can he follow directions and observe rules?
Does he react promptly or does he appear puzzled when spoken to?
Is he interested in school?
Does he play with other children?
Does he seek the protection of the teacher?
Does he help other children?
Does he enjoy playing or is he bored?
Does he know his left hand, right foot, head, knees, neck, thumbs, etc.?
Does he talk about his activities?

From these observations the teacher obtains data on speech habits, interests, vocabulary, former experiences, power of recall, ability in comprehension and often discovers hearing and seeing disabilities. The alert teacher uses this information in lessons designed to correct speech habits, to create or broaden interests and experience and to improve vocabulary.

Observations During The Story Period

Most children love stories and the story period provides an opportunity for the observant teacher to gather more data.
What type of story appeals to Tommy? to Jack?
How much of the story can he recall?
What part of the story appealed to him?

Does he answer questions (a) by one word? (b) by phrases? (c) by sentences?

Does he use the words of the story or does he express the thought in his own words?

During the Story Period a close watch should be kept for the kind of story which brings the greatest response for the class. Is it the story with an adventure, a climax, a hidden moral, plenty of action, a fairy tale, a lot of conversation or a bit of humour or a story with plenty of repetition?

These observations give a lead for the construction of short blackboard stories which the teacher will shortly use.

Observations -- The Basis of Diagnosis

These observations c an be used by the teacher to classify the pupils into:-

(1) The leaders, the shy, the potential bullies, etc.;
(2) The speech, auditory and visual defects;
(3) The inattentive and the problem;
(4) The adjusted and the unadjusted;
(5) Those who need or do not need special motivation;
(6) The interested and the uninterested.

These are basic observations which the teacher can use to prevent failure in reading. The child's interest is active, personal and objective. This means that the pupils must be doing things and sharing this activity and interest with the teacher and his classmates. Some interests and activities are transient, while others are permanent.

Approach To The Reading Programme

It is assumed that you use as your main method, the one which brings you the best results because teaching is a special art which depends on personal abilities, preferences and characteristics. Being a master of that method, you will be alert to its weaknesses but you should vary it as soon as interest lags. This implies that the teacher must be competent in all methods and know them well enough to use them in periods during which the teacher's competence is critical for the pupil. She should know and be able to apply:

(1) The A.B.C. Method -- In short this is a spelling method.
(2) The Word Method -- For use with pictures and actions.
(3) The Sentence Method -- For use with pictures and games.
(4) The Story Method -- Sometimes called Nursery Rhyme Method.
(5) The Phonic Method - Another spelling method.
(6) The Kinaesthetic or Tactile Method -- Employs four senses at once.
(7) The Non-oral Method -- This stresses meaning before form.
(8) The Combination Method -- Under which all methods are used appropriately.

Teaching Reading

Many teachers commence instruction by introducing words from a predetermined list or they accept the word-lists of some pre-primers. The child's own vocabulary is one which he personally developed, and contains the words which

interest him. If the words which are used by the child in his everyday activities are not used or included in the reading list, the teacher is not joining on the new reading experience to the spoken vocabulary most familiar to the child. For this reason the teacher must vary the word list according to the class.

1. Teach words which the child may use in his everyday activities but not too many at once.
2. Long words are just as acceptable as short ones.
3. Do not teach too many words at once.
4. Give the child time to think about the word.
5. Provide a point of reference for each word.
6. Be careful to teach words which stand out definitely, e.g. "go" "elephant" -- where there is no trouble of configuration and not pairs like "day" and "boy", "left" and "felt", "gay" and "jay", etc.
7. Where the word is truly picturable try to use a picture and where it is not truly picturable demonstrate, if possible, and often.

The teacher may have pupils who do not listen, do not attend, and apparently do not try. This is the group that needs the greatest care as they may not be ready to read. Experience, records and experiments indicate that the ordinary child is six-and-a-half years old when he is ready to read. Some have not had any "urge for" reading or preliminary reading experiences in the home. Some are probably undeveloped intellectually and require time and experiences before being introduced to the reading of print. They can read pictures and can develop their language abilities. They can learn classroom routine and may require a different method than is employed by the teacher for the majority of the class. The recluse, who stands by, letting the other fellow do the work, often comes out of his shell if taken individually. Many children are failed by the teacher in the first month at school by demanding too much from pupils who are not ready.

There will always be a group who can go faster than the average. Usually there is a group which starts slowly at first and then proceeds at the average rate.

With these different levels the teacher must not allow the general class spirit to lag. Praise for good effort and comparison of his performance with previous attempts are honest ways of maintaining spirits and interest. Don't compare the slow-moving child's work with that of an outstanding performer. A child is proud to say, "This is better than yesterday, isn't it?" Encourage him to beat his previous record.

The teacher should plan to make the child aware of why he learns certain words, reads certain stories and what it may lead into. Individual differences in teachers and pupils involve so many different view points and preferences that it is difficult to provide enough variety within the pages of a book. Blackboard reading lessons and teacher-prepared charts are useful in increasing the rate of reading, word grouping or word recognition and can satisfy many of their individual preferences. Stories like the following are extremely useful:

1. Jack has a new leash for his dog.
2. A little girl in the class has a new coat to-day.
3. Harry read well to-day.
4. Tom bumped his nose.

The children must be adjusted socially within the group. Their social needs and difficulties must be considered and an active programme initiated to provide them and link them to the reading materials and past experiences. The child must be made aware of his own needs, while he is being encouraged and trained to seek help when in difficulty, if he is to be given a feeling of security. Otherwise he may become a persistent guesser or muddler in words.

Knowledge Of Reading Material

Prevention depends to a great extent on the teacher's knowledge of suitable books and other reading materials. Children who have one book only may be completely frustrated, bored by it, because of the number of new words on each succeeding page. His struggle with each day's assignment may prevent him from grasping the thought and may result in discouragement, loss of interest and failure, when for efficient teaching, self-confidence, interest and success are required.

1. The teacher-prepared reading material should stem from, and reflect, the pupils' vocabulary, interests and preferences.

2. The teacher must have a knowledge of the existing primary books if she is to fit her instruction to the exact reading level of the child, or to secure motivation from dramatization and self-expression, or to develop vocabulary.

Once the child has reached the Independent Reading Level leave plenty of books at his disposal.

Knowledge Of The Genesis Of Bad Habits And Errors

Sometimes children acquire habits such as lip-moving, vocalizing and finger pointing, which may come from a desire to make it more real. Unnatural head movements, fussing with clothing and body movements are often a sign of frustration, which can be overcome by using easier books. High pitched voices may be due to anxiety or nervousness which can be overcome by dramatization. Very short sentences at first are suggested to overcome finger pointing. The sentence can be lengthened gradually somewhat after this fashion:

This is Jane.
This is Jane under the tree.
This is Jane under the big tree.
This is Jane under the great big tree.
This is Jane under the great big tree in the garden.

These overt signs are symptoms of physical or experimental conditions. There prevention involves an attack at the cause. For example, in phonics pupils are often able to analyse the words but are unable to synthesize them. Lessons in listening are helpful. Speech substitutions may be corrected by imitation in front of a mirror large enough to accommodate both teacher and pupil.

Small type and spacing is a hazard to the eyes of young children and may be a cause of finger pointing which seems to develop into a habit from attempts to keep the place. The child who frowns, shows many facial expressions, or much blinking, or changes the position of the book, shows signs of a visual handicap which should be checked.

A slight hearing loss may affect reading progress. If at all suspicious, hearing should be checked.

Relaxation periods such as a thinking period, an activity period, a Read and Do period pay good dividends. Two short periods in a Junior Grade are better than one long one.

C - Problems With Retarded Readers - (Grades 1 to 4) - Miss M. Thomas

1. Pupil Material

In June each teacher of Grades 1, 2 and 3 was asked to list those pupils who would profit most next year from Remedial Reading Instruction.

That is 1. those who were passing on the borderline.
2. those who had missed work through illness.
3. slow pupils who would in two months' holiday be capable of better work with a little help.
4. any others who needed extra reading help.

2. Selection of Pupils

1. In September with the aid of these lists obtained in June and promotion sheet marks, a list of about 200 pupils was compiled.
2. By informal tests the list was cut to approximately 100.

3. Classes

1. 10 classes
2. 5 pupils to a class.
3. 5 reserve pupils for each class.
4. time - 20 minutes to 30 minutes. Each teacher was consulted to find a time best suited to her time-table - very good co-operation found.
5. Grade 2, 3 and 4. In February Grade 1 classes will take the place of Grade IV classes.

4. Testing

1. Each pupil tested with Dominion Tests and Gates Oral, to find
   (a) Basal reading level
   (b) Breakdown of errors in reading
   (c) Case Studies
   (d) Re-testing monthly - re-adjust child's needs and ascertain progress.

5. Errors

1. Reveal type of instruction necessary.
2. Provide basis for future check-ups.

6. Purpose of Instruction (varies)

1. Confidence
2. Enjoyment of Reading
3. To build word attack (a) phonics (b) word recognition (c) word composition.
4. Comprehension
5. Speed.

7. Materials

1. Basal readers
2. Remedial workbooks
3. Most materials personally compiled.

8. Findings

1. Most children require similar type of programme
   (a) Pupils retarded one year to two and a half years
   (b) 85% errors in word recognition.
   (c) Phonetic approach a help but must not be over emphasized.
2. Social background is important
   (a) Parental neglect - attendance - health
   (b) Home conditions discourage child
3. Physical condition
   (a) In a great many cases is a great factor in reading failure.
4. Racial problem
   (a) English not spoken in the home
   (b) Attendance at private school

9. Allied Agencies

Close co-operation with (a) Classroom teacher
(b) Doctor, nurse
(c) Psychologist
(d) Home.

10. Results of Year's Work

1. Expectations
2. Limitations.

D.- Usage of Readers - The Basal Reader Approach - Miss Margaret Robinson

1. The Challenge and Need

The traditional way of teaching reading has been through the use of prescribed graded readers. It was a regimented system which forced each child to use the same reader as his classmates and which disregarded the principle of individual differences. Frequently the results were disappointing as evidenced by data from various surveys. Note the following statements - (1) One-half of the adult population have no reading interests. (2) About one-third rank below fifth grade in reading. (3) Forty to sixty percent. of children are frustrated in reading due to the difficulty of the reading material which they are using. Hence educators have felt there was an imperative need (1) to improve reading materials; (2) to provide the pupil with the reading material most suitable to his ability and (3) to improve lesson planning based on a thorough understanding of the basic principles of learning.

2. Basal Readers

Most children can be taught to read by the basal reader approach, i.e. using a series of basal readers. These are readers in which the selections are carefully chosen to stimulate children's interests and to develop reading skills. They are based on a limited core vocabulary which is repeated systematically. The number of concepts on a page, the sentence structure and length of sentences are controlled also. The acquiring of basal reading materials does not assure a teacher that her reading problems are solved. Much depends on how the books are used and if the interests of the pupils are challenged. In order to prevent or correct reading difficulties the pupils must have readers on their level of reading ability. Because of the great spread of individual differences in a classroom there should be several readers of different grades in use.

Many basal series of readers have reading readiness books which are used to screen out those pupils who need continued prereading and serve as a basis in preparation for the developmental reading program. Preprimers and workbooks are used for initial reading instruction. Primers, basal readers, workbooks and complementary materials for the various grades form the basis of the developmental reading lessons throughout the school.

3. Why Group Pupils For Reading

Children differ greatly physically, emotionally, mentally, as well as in their preschool training, in their needs, and in their interests. They vary widely in their capacities and in their achievements. Our aim should be to develop each child's ability to its full capacity. To achieve this aim would require individual teaching of each child on his own level and at his own rate of learning. However, teachers of large classes cannot teach all their pupils individually but they can at least try to group them according to their ability and do as much teaching as possible in groups. We are not fair or democratic in our methods if we treat all pupils as if they were average pupils and make no allowance for those who are slow or superior. In each classroom there are many reading grades and the range of ability is even greater in better districts due to the pupils' broader background of information.

4. How Determine the Right Reader for Each Pupil

(1) Diagnose pupil's reading grade.
   (a) By teachers' observations.
   (b) Vocabulary tests followed by informal tests from basal readers. A criterion for measuring pupil's reading ability could be as follows: 75% comprehension, 95% pronunciation and accuracy, good phrasing, conversational tone, no head movements, no tension, no vocalization, etc. If the child measures up to this standard he is reading from the right book.
   (c) Standardized reading tests.
   (d) Informal tests based on other graded reading material.

(2) Know several series of readers. For a greatly retarded reader select a series with higher interest selections.

5. How Teach In Groups

One way to prevent reading difficulties is by grouping children according to their reading ability. A plan that has been tried out successfully in many places is the three group plan. From such appraisals as mentioned above, the range of reading abilities is determined and the class divided into superior readers, average readers, and below average readers. Pupils may choose their own group names, e.g. Bridge-builders, Treasure-seekers, Bookshelf club, Reds, Yellows, Blues, etc. As these pupils grow at different rates, the grouping is flexible, members frequently being transferred to other groups. Visiting from one group to another also should be permitted.

A suggestion is to teach first the C group seated around a table or in a circle for twenty minutes while the A and B groups are having either related literature or doing other challenging work at their desks. They will continue their assignment at their seats while the B group is taught similarly from the basal reader of their level. The A group of superior readers require challenging material on

their reading level and should be taught similarly. If their period has to be shortened they can do much silent reading of easier recreational material followed by a discussion period.

6. Some Basic Principles in Teaching Reading

(1) The most fundamental principle is that of differentiation of instruction in the classroom based on the fact that children differ. "Begin where the learner is." Some other principles are:
(2) Reading should be purposeful, meaningful and motivated by the reader's needs and interests.
(3) There should be attention to reading readiness at all grade levels and for every lesson.
(4) There should be rapport between: (a) teacher and pupil, (b) pupil and pupil, (c) pupil and lesson.
(5) The first reading must always be silent. "Silent reading must precede oral reading."

7. Lesson Procedures

(1) "An inspired and well-prepared teacher is better than any cold method". E. A. Betts.
(2) "It is unlikely that research will ever discover a single method which will be the most efficient one for all pupils and all teachers". D.D. Durrell.
(3) As a suggestion we recommend a plan adapted from E. A. Betts, Chapter XXII Foundations of Reading Instruction - American Book Co.
(a) Preparation or Readiness
(i) Make use of and supply the necessary background of information.
(ii) Arouse interest in setting, plot, interesting features and purpose.
(iii) Introduce new vocabulary orally.
(b) Guided silent survey reading to get main ideas and sequence of events.
(c) Detailed study guided by inferential, vocabulary and verifying questions. Here all vocabulary difficulties should be cleared away.
(d) Purposeful rereading either silent or oral depending on the situation. These steps are not consecutive but interrelated.
(e) Follow-up activities should be differentiated as all children do not need the same activity.

These five steps merge into a whole literature lesson. The teacher is aware of the five different steps, no matter in what order they are taken, but to the pupil the lesson is continuous even though it occurs on different days.

Again may we repeat that much retardation of the future may be prevented (1) by using basal readers, (2) by grouping pupils according to their reading ability and (3) by providing pupils with the "right" reader. Better results are obtained if the teacher uses a combined basal reader and experience approach, i.e. enterprises are undertaken which necessitate use of the selections in the readers.

8. List of Series of Basal Readers

For list of series of basal readers see revised pamphlet #12 published by Department of Educational Research viz. Elementary Graded Reading Series. Study this pamphlet when selecting series of readers for a whole school in order to prevent duplication of readers.

E - Correction and Compensation - The Academically Handicapped - Mr. J. M. Neale

In the Middle and Upper Grades of the Elementary School, the pupils are concerned mostly with learning about things that lie beyond the limits of their immediate environment. In doing so, they encounter many new reading problems. They have to visualize accurately things and events which they have never seen or heard as well as comprehend more mature language forms such as inverted sentences, figures of speech and abstract words. During their progress through s chool they have acquired many careless habits of reading and when the time arrives for effective, purposeful reading, they are overwhelmed and confused.

It is then apparent that reading programmes must be adjusted to meet the dominant characteristics, interests and needs of the pupils. This problem is complicated by three things - pupils do not mature at the same rate - several levels of reading are found in the same classroom - the remedies required vary greatly. This gives the problems of Individual - Group - Class Instruction.

The Academically Handicapped begin to fall behind early in their school life. They fail to keep pace with the normal because of lower mentality, lack of language facility, poor powers of imagination and ineffective teaching.

Methods of Approach to his Problem

1. Gain his confidence and rise his self-respect.
2. Investigate his environment.
3. Find his reading level, his likes in reading, his interests.
4. Tabulate any Oral Reading Faults.
5. Record his Speech and Comprehension of a graded extract.

Oral Reading Faults & Techniques to Improve Them.

Poor Phrasing - Phrases are written on the board from words already taught.
The teacher selects an extract and marks off the phrases.
The teacher reads a paragraph and the pupils mark the phrases with a pencil.
Building up sentences starting with Bare Subject and Bare Predicate.
Group Reading in Unison.
Give easier material until a meaningful unit is read.
Coordinate Eye-Voice Span with Phrasing.

Poor Word Attack - Give extra practice in phonics, blending and word-building.
Write lists of word combinations on the board.
Take regular, daily practice on left-to-right orientation through all words.

Unnatural Voice Pitch - Make certain your own voice is natural.
Advise the pupils to prepare at home the extract beforehand.
Test each voice on the piano - speaking pitch vs. reading pitch.
Overexaggeration by teacher.

Inadequate Expression - Dramatization of suitable sections of a story.
Use of prepared sentences with emphasis on different words to change the meaning.
An imaginary radio broadcast of a dramatic section of a story.

Faulty Enunciation - Division of words into syllables. Drill on specific errors. Reading in whispers. Mouth exercises. Use of tongue. Opening teeth as well as mouth.

Repetition of Words or Phrases - Give easier materials. Concert reading with pauses over-emphasized.

Addition or Omission of Words - If these do not alter the meaning, disregard them. Concert reading with pupils following the line with a pencil. Presentation by pupils of an advertising commercial for a radio broadcast.

Reversals, Additions, Omissions - Marking beginnings or endings etc. with a pencil.

Final Syllables - Reading of story about pupils' particular interests.

Further Suggestions

These errors require constant correction. Try new methods of attack. Vary the drill lessons. Build up confidence by using easier materials. On a special occasion have the poorer reader read a prepared extract to the group so that they may enjoy his work and he their approval.

Silent Reading

The correction of Oral Reading Faults will cause a corresponding improvement in Silent Reading Practices.

Instructions For Silent Reading - (to be read to Group often.)

1. Force yourself to read a little faster than is comfortable. Don't worry if you miss the exact meaning of a word, phrase or sentence. Read ahead. Get the main idea. That's what counts most.
2. Keep a record of your own speed. Don't read from word to word. Glance at the line and get the idea.
3. Keep your lips and head still. Relax. Take it easy.
4. Don't let your eyes stop on a word or sentence. Keep going.
5. Never go back over a line. Go on.
6. Try glancing down the centre of the page - one glance to a line.
7. Remember you must read some things quickly to get the main idea - book, magazine, newspaper. Other things you must read slowly word by word - telegram, instructions for a job.

Speed vs Comprehension

Both are necessary for satisfactory reading and are interrelated. The contention is that if speed is increased by extra practice in phrasing, eye span lengthened and interesting materials given, comprehension will gradually reach the normal standard.

Materials

Extracts on Basal Level from the Prescribed Text.
Extracts (mimeographed) from Stories, Magazines, Newspapers.

Paragraphs or Extracts Prepared by the Teacher

Rewrite an extract on some topic of current interest or take an interesting section from a book, magazine or newspaper. (150 - 200 words.)

Plan 5 questions - one on general significance - three on details - one on inference.

Mimeograph and present to the class once a week.

F. - Correction and Compensation - Academically and Physically Handicapped - Mr. W. F. Koerber.

Devices for Screening Out Those Deficient in Visual and Hearing Acuity

1. Vision

The Projecto-O-Chart, manufactured by the American Optical Company and distributed in Canada by the Concolidated Optical Company.

This device is, in its essentials, an adaptation of the well-known Snellen Chart, with the following advantages. The subject to be tested is seated twenty feet in front of a small aluminum coated screen. It is possible to project upon the screen rows of test letters differing in size from 20/400 to 20/10; there are also available four charts for the detection of gross amounts of astigmatism. It is possible, by using shutters and horizontal slides, to project one row of a certain size of letter, say 20/25, or a single letter of any optical size and thus, by hiding from view all irrelevant letters, focus concentration upon the specific line or letter to be read. Pictures of objects can be substituted for letters when the subject to be tested is unable to read. Series of concentric circles, one of two, one of three, can be used as a check on previous results especially with the non-reader; such concentric circles are said to be uniformly affected by astigmatism. Letters and charts are always uniformly illuminated; it is not necessary to depend upon the illumination in the room or the position of the windows.

All whose visual acuity is found to be 20/25 or less in one or both eyes functioning separately or together (20/20 is considered normal acuity) are referred to an ophthalmologist with instructions to provide eyeglasses whenever necessary. These glasses are dispensed by an optician who gives instructions for their use and explains to each boy just what the glasses will do for him. Up to the present, all glasses dispensed have been paid for by the Downtown Optimist Club.

2. Hearing

The Group Audiometer, distributed in Toronto by the Audiphone Company of Toronto, 57 Bloor St., W.

This mechanical device, equipped with ten ear-phones, has been developed to assist in singling out pupils who appear to have hearing defects serious enough to warrant careful examination by a medical doctor, preferably a specialist in conditions relating to the ear. It should be emphasized that the machine does not attempt to establish an absolute rating of hearing efficiency; it is fundamentally a screening device, capable of giving helpful assistance in the evaluation of cases of borderline deficiency.

Ten pupils at a time, each with an ear-phone snugly fitted over one ear, listen to numbers being spoken first by a woman's voice and then by a man's voice, and write them in pairs, in the proper spaces, ruled on a specially prepared sheet of paper. The numbers, spoken with accurately calculated diminishing loudness, emanate from a phonograph record. The right ear is tested first and then the left. All having hearing losses of nine decibels or more in one or both ears are referred to an otologist.

He retests them with more sensitive apparatus. He classifies them according to the probable cause of their deficiency and suggests or initiates remedial measures. The following is a list of probable causes and suggested remedies.

(1) Lack of vitality of the nerve feeding the ear. Supplementary Vitamin B diet suggested.
(2) Tonsils and adenoids. Parents advised by school nurse. Co-operation discouraging.
(3) Adenoid vestiges and hardened wax. Removed by doctor.
(4) Permanent impairment due to previous illnesses. Have boy sit near teacher.
(5) Congenital reasons. Have blood test. If negative, Vitamin B diet and hearing aid.

3. Reading Aid

The Metronoscope, distributed by the American Optical Company. Not available at present.

This machine is nothing more than a mechanically impelled tachistoscope (a device to permit the timed exposure of reading material). It was originally developed to pace eye movements, that is to increase the span of recognition so that the eye will move along the line with fewer fixations, fewer regressions and with an accurate return sweep. In view of the constant controversy as to whether eye movements are causes or symptoms of poor reading, the interest compelling possibilities of the machine have been relatively unexplored. We have found that adolescent boys are interested in reading from it because it presents the material to be read in a novel method ; furthermore, they are not able to associate the new reading experiences with recollections of previous difficulties and failures.

G - Reading Problems In Secondary Schools - Miss Lucy Barton

1. Survey: Traxler Silent Reading Test 7 - 10, Form I was administered to all students in our eighteen grade IX classes. The tests were marked and returned to the pupils. As the part scores were explained, each pupil made two profiles of his results, using as the basic measuring scheme Dr. Traxler's norms for Grade IX. One of these profiles the pupil retained, the other he returned with his test paper to the guidance department. All good profiles -- those indicating average and above average reading ability -- were filed in the cumulative folders. The poor ones are kept separate for further investigation.

Two other records were made of these test results. First, in class lists the reading grade was entered for each student. This showed up omissions and made possible quick and easy reference for individual students.

Then a chart was drawn up to show the total scores of all the 650 grade IX students of our school. It is apparent from this that the average student in our grade IX reads a little better than grade X students whom Traxler examined. Consequently, next year the profiles will be made on the basis of Dr. Traxler's scores for grade X.

2. Selection of Remedial Reading Pupils: The English teachers examined the scores of their classes. Using these results, the English marks, and estimates of each pupil's abilities, the teacher decided who should have remedial reading help. Occasionally the pupils made the decision. Later in the year, marks in all subjects and intelligence ratings would be taken into consideration.

3. Setting-up of reading groups: It is possible to hold remedial reading classes during some literature periods. The department requires Grade IX to study three books. Our classes study four, and remedial reading pupils are taught during regular class lessons on one of these four books, preferably the short poems or the Shakespearean play. Each remedial group has pupils from one, two, or three classes. I have responsibility for assigning marks during this time. When the literature text book is changed, of course the reading pupils return to their classes.

4. Diagnosis of individual reading problems: I am becoming more and more convinced that "group" or "class" in high school remedial reading is a misnomer. Each retarded reader has an individual problem or a series of problems making him a misfit in the class. There are, however, areas which the teacher can explore.

(a) Intelligence - It's helpful to have language and non-language scores-- such as are obtained from California Tests of Mental Maturity or from individual tests.
(b) Vision - by observing pupils' reading habits, by telebinocular test.
(c) Health - nurse's report.
(d) Social factors - nurse's report and interview.
(e) Educational background and attitude towards reading - interview
(f) Reading skills --
  oral - reading aloud from graded readers or from oral reading tests.
  other skills - such tests as comprise the Monroe Diagnostic.

5. Class work: Ideally, each pupil's work would be planned to correct his faults. So far we have not been able to organize the work in this way. Here, however, are some of our methods of dealing with common deficiencies.

(a) poor visual techniques:
  i study of eye movements in reading
  ii practice to increase the span of recognition - cards, other flash techniques.
  iii timed reading, with subsequent testing of understanding.

(b) inadequate comprehension:
  i choosing suitable material
  ii teaching - as one would teach literature - with stress on implication, imagination, pictures -- with frequent reference to the text.

(c) poor vocabulary:
  i dictionary drill
  ii word-building - particularly from Latin and Greek, training in use of context clues.

(d) enrichment of voluntary reading: i helping pupils to choose suitable books
ii extension of reading into many fields
iii book discussions
iv reading records.

H. Professionsl Books Recommended

These books are listed in the Circulars on Reading prepared by the Department of Educational Research, Ontario College of Education, 371 Bloor St. W., Toronto. This list consists of those used and recommended by the members of this panel. They are listed giving author, title and publisher.

Betts - Foundations of Reading Instruction - Toronto, W. J. Gage.
Betts - The Prevention and Correction of Reading Difficulties - Toronto, W. J. Gage.
Burt - The Backward Child - Toronto, Clarke Irwin.
Bond and Bond - Teaching The Child To Read - Toronto, Macmillan.
Cole - The Improvement of Reading - Toronto, Oxford
Dolch - A Manual For Remedial Reading - Champaign, Illinois, The Garrard Press.
Durrell - Improvement of Basic Reading Abilities - Toronto, W. J. Gage.
Fernald - Remedial Techniques In Basic School Subjects - Toronto, Ryerson.
Gans - Guiding Children's Reading Through Experiences - New York, Bureau of Publications Columbia University.
Gates - The Improvement of Reading - Toronto, Macmillan.
Gillingham and Stillman - Remedial Training For Children With Specific Disability In Reading, Spelling & Penmanship - New York, Sackett & Wilhems,
Harris - How To Increase Reading Ability - Toronto, Longmans, Green.
Hildreth & Wright - Helping Children To Read - New York, Bureau of Publications, Columbia University.
Kirk - Teaching Reading to Slow Learning Children - Boston, Houghton Mifflin.
Monroe - Children Who Cannot Read - Chicago, University of Chicago Press.
McAllister - The Primary Teacher's Guide to Speech Correction - Toronto, Clarke Irwin.
McAllister - Steps In Speech Training, Steps 1 - 5, Teacher's Book - Toronto, Clarke Irwin.
Robinson - Why Pupils Fail In Reading - Chicago, University of Chicago Press.
Schonell - The Psychology and Teaching of Reading - Toronto, Clarke Irwin.
Schonell - Backwardness In The Basic Subjects - Toronto, Clarke Irwin.
Witty and Kopel - Reading and The Educative Process - Toronto, Ginn.

I. Books Recommended For Teaching and Practice.

Beside the modern sets of readers now offered by the publishers with which every teacher should be familiar the following books are helpful.

Brueckner - Diagnostic Tests and Remedial Exercises In Reading - Toronto, Winston.
Durrell & Sullivan - Building Word Power - Toronto, Gage.
Gates & Peardon - Practice Exercises In Reading, Books III, IV, V, VI, Types A, B, C and D New York, Bureau of Public ations, Columbia University.
Russell, Karp & Kelly - Reading Aids Through The Grades - New York, Bureau of Publications, Columbia University.
Stone - Eye and Ear Fun - Toronto, Longmans, Green.
--- The Wonder Books - Toronto, Moyer School Supplies.
Wilkinson & Brown - Improving Your Reading - Toronto, Clarke Irwin.

J. Tests Used and Recommended.

Detroit Silent Reading Tests - World Book Co., Yonkers-on-Hudson, New York.
Test 1 for Grade 2 - Forms A and B
Test 2 for Grade 3 - Forms A, B & C.
Test 3 for Grades 4, 5 & 6 - Forms A, B, C & D.
Test 4 for Grades 7, 8 & 9 - Forms A, B, C & D.

The Dominion Tests - The Vocational Guidance Centre, 371 Bloor St. W., Toronto.
See catalogue for exact description.
Catalgue No.
810 - Dominion Achievement Tests In Silent Reading - Primary, Grade I
Type I - Word Recognition.
811 - Dominion Achievement Tests In Silent Reading, Primary, Grade I
Type II - Phrase & Sentence Reading.
812 - Dominion Achievement Tests In Silent Reading, Primary, Grade I
Type III - Paragraph Reading
813 - Dominion Achievement Tests In Silent Reading, Primary, Grade I
Type IV - Diagnostic Test In Word Recognition.
814 - Dominion Achievement Tests In Silent Reading - Grades 2 & 3
Type I - Vocabulary Test.
817 - Dominion Achievement Tests In Silent Reading - Grades 3 & 4
Type II - Diagnostic Test In Paragraph Reading.
815 - Dominion Achievement Test In Silent Reading - Grade 2
Type II - Diagnostic Test In Paragraph Reading.
816 - Dominion Achievement Tests In Silent Reading - Grades 4, 5 & 6
Type I - Vocabulary Test.

Gates Basic Reading Tests for Grades 3 - 8 - Bureau of Publications, Columbia University New York
Type A - Forms 1, 2 and 3 - Ability to grasp general significance
Type B - Forms 1, 2 and 3 - Ability to predict outcomes.
Type C - Forms 1, 2 and 3 - Ability to understand specific directions.
Type D - Forms 1, 2,and 3 - Ability to note details.

Iowa Silent Reading Tests for Grades 4 - 9, Forms A & B
Vocational Guidance Centre, 371 Bloor St. W., Toronto.

Gates Reading Survey For Grades 3 - 10 (Vocabulary, Level of Comprehension, Speed and Accuracy) Forms I & II
Bureau of Publications, Teachers College, Columbia University, New York.

Metropolitan Achievement Tests In Reading,- World Book Co., Yonkers-on-Hudson, New York.
Intermediate - For Grades 4, 5 & 6 - Forms A, B & C.
Advanced - For Grades 7 & 8 - Forms A, B & C.

Monroe & Sherman - Group Diagnostic Reading Aptitude and Achievement Tests For Grades 3 - 9 - Nevins Printing Co., Pittsburgh.

Sangren-Woody Reading Tests - World Book Co., Yonkers-on-Hudson, New York.
Forms A & B for Grades 4 - 8.

Van Wagenen - Reading Readiness Test - Educational Test Bureau, Philadelphia.

~~Craft Courses For The Handicapped~~ No. 3

Prepared by Alex McLean
Principal of the Warren Park Handicraft School

and

C. E. Stothers
Inspector of Auxiliary Classes
Department of Education.

JUNIOR WOODWORK

in

SPECIAL CLASSES

Auxiliary Education Branch
Department of Education, Toronto

March, 1947. 500 copies.

1. Table of Contents

2. Purpose

This pamphlet has been prepared for the guidance of teachers of opportunity and handicraft classes, where pupils with a mental age of eight years or over would benefit from instruction in woodwork. Within these pages it is impossible to do more than give essential facts which may help the teacher who is new to the problem of instructing direct learners and slow learners.

3. A Philosophy of Educational Woodwork

Woodwork has been recognized as an excellent medium for teaching the slow learner. It has a universal appeal because it can be seen and handled. It is in three dimensions. Wood is a material which can be processed by persons with varying levels of ability and with differing degrees of skill. The quality of the finished project depends on abilities and skills in an ascending scale over a very wide range of practical projects. Pupils recognize woodwork as a useful employment of their time because they know that adult workmen make their living at it.

The pupil's woodwork products in the special class should not be measured by adult or trade standards. Woodwork in the classroom is used to make things in which the pupil is interested, and to present real materials which may be used to develop vocabulary, language and practical arithmetic.

It has been proven definitely that learning proceeds more efficiently when the learner is in direct contact (where he can see, handle, observe and manipulate) with the learning materials and the learning problem. In Army Training during World War II, learning was much more efficient after the actual weapons were made and issued to the troops than it was when they were being told about them and given diagrams to study. The pupil in the special class has had trouble with abstract learning and may be given practical woodwork projects to introduce him to new materials and new methods, where the chances of securing success are unusually high. Woodwork may be helpful, therefore, in proving that school work does not regularly produce failure and frustration.

The standard of the first completed project should be the pupil's standard. Has he completed it in a reasonably short time? Does it appear to him to be a satisfactory and worthy job? Will it receive the commendation of his parents, relatives, friends and neighbours? These psychological factors are most important in his first attempt at woodwork. Trade and adult standards may come later.

The teacher's part in this first lesson or series of lessons is to choose a model which the pupil can finish in a short time, and one which is within his mechanical ability. In the second and subsequent lessons, the teacher's knowledge and skill should be shown in choosing woodwork models by which the pupil can advance at his own rate. Too much dependence on DRILL PSYCHOLOGIES should be changed to greater dependence on the pupil's insight and developing skills, as well as the teacher's ability to measure the project as a unit which may be finished in a particular period by a pupil.

The woodwork products made in the classroom must be useful to the pupil or in the household. Models which are simple in construction and useful in school games, or to the mothers as well as the pupil, are recommended. If the article constructed can be used as a Christmas present or a birthday present, it will be that much more effective.

From the teacher's point of view, woodwork is an excellent means to develop self-confidence in the minds of pupils who have experienced failure and frustration over a period of years. In the shop approach, an attitude of participation, and willingness to attack new problems should be developed, instead of the negative attitudes often observed as applying to reading and arithmetic. The shop period should encourage the pupil to put forth a worthy effort again. If the teacher is careful to provide some correlation of shop work with academic subjects, the value of woodwork in terms of renewed interest in school work can be very great.

Success in woodwork, success in getting along with the teacher of woodwork, and success in cooperating and competing with other pupils may transfer to other subjects. This success in human relations during the woodwork period cannot fail to affect social development both in and out of school. Success in one line satisfies certain basic needs, such as being considered worthwhile, of belonging and of achieving recognition. The alert teacher will see that a child gets sincere recognition for honest effort. This will gradually decrease a child's habit of securing recognition by means of disorderly conduct, or by breaking school rules.

4. Teaching Method

The boy who enters a handicraft shop should be given a project which he can complete without having to use any great degree of skill. Previous to doing woodwork, he should be given preparatory training within his ability.

~~Projects which~~ fulfill these requirements appear to be as follows:-

(1) The boy could be given a small disc of copper or aluminum, a wooden form and a wooden mallet. He is asked to beat out a shallow tray in this form. With a file he dulls the sharp edges, and with steel wool, he polishes it. At the end of the period he has something to take home.
(2) Assembling a belt from a commercial leather Kit. He can take it home to show his parents, and can return it if no one wants to buy it.
(3) With sandpaper and a sharp knife, he could carve a dog out of 1" balsa wood. He could trace a pattern on the wood, carve it, and sand it smooth.
(4) He could cut a small tin can into the shape of a scoop, file the edges and with emery paper dull the edges. He could cut a D - handle with a coping saw and fasten it to the base of the can with screw nails.
(5) He could try carving a flower in outline or low relief on a previously prepared placque using a pen knife or a set of small wood-carving chisels.
(6) He could trace a simple picture on a wooden placque and with a pen knife incise the outlines to divide the parts which may be coloured with water colour and later shellacked.
(7) Wiring an electric bell with a push-button might be considered a worth-while occupation.
(8) Assemble plastic "ready-to-assemble kits" - such as are available from Plastic Distributing Co., Ltd., 165 Spadina Avenue, Toronto.

Such projects do not extend over a long period, but achieve quick results which are surprising and satisfying to the boy. These projects do require much more preparation on the part of the teacher, who may find it easier to approach the work in a logical way, when a psychological approach is essential. By carrying out a series of projects as an introduction to woodwork, the teacher can study the boy's ability and his interests, and develop plans to suit individuals.

The second necessary step is to stimulate the boy with pictures, plans and models. When he is offered a range of projects, the idea of the skills to be developed should be introduced. He should be encouraged to show how he would assemble a model by using pieces from the box for scraps of wood which he may have to saw to secure an approximate fit.

If the handwork is introduced somewhat in this way, the teacher is able to observe a boy's natural abilities in hammering, filing, scouring, sanding, shaping, carving, tracing, painting, fitting and sawing. At the same time opportunities are afforded for showing improved techniques and preparing him to accept shop standards.

The next stage is to permit the boy to attempt a woodwork project which is interesting to him. He may choose a model which is far beyond his ability.

The teacher may elect to have him assemble a model from pieces prepared by the teacher. The pupil's part is to assemble and finish the model. The pupil may be persuaded to start on an easier model. If the more experienced boys prepare extra materials for their models, the teacher without power machinery will not have to shape these boards personally.

The last step is to have the boy make the whole model himself. This should come after he has had experience with all the necessary tools and operations, and after he has demonstrated his understanding of the model by demonstrating the steps using scrapwood.

Draughting and the formal presentation of a class lesson should be left until the boy is ready for it. Work involving power machines may be deferred until the boy has had some experience with bench tools.

Simple Household Repairs

Simple repairs around the house can be made by handy boys. The teacher must provide preliminary practice with suggestions, instructions and encouragement. It has been found that a tool kit available for loan, displayed in a prominent place in the room stimulates boys to use it.

The tool kit should contain a saw, a pair of pliers, a jack plane, a hand drill, a rule, a square and a screwdriver. A pair of 36" bar clamps may also be loaned for gluing chairs.

The following is a list of household repairs which could be made:-

1. Replacing or tightening hinges, by using plugs and same screws, or larger screws.
2. Renailing quarter round moulding at floors to remedy shrinkage.
3. Replacing pickets in a fence or gate.
4. Replacing broken or rotted pieces in garden furniture.
5. Putting plate stop mouldings 3/8 x 3/8 at backs of cupboard and cabinet shelves.
6. Simple furniture repairs as regluing and clamping; and by inserting glue blocks or corner braces and mending plates.
7. Repairing cracks in walls with crack filler.
8. Repairing broken steps.
9. Putting new screen netting in frames.
10. Shortening clothes line.
11. Planing sticking doors to make them close freely.
12. Oiling squeaky hinges.
13. Installing shelves in basement or pantry.
14. Removing broken glass from window.
15. Put in new glass with glazing points and putty.
16. Replace float in flush tank. (It screws off)
17. Replace washer in common tap.
18. Clean out drain-trap by removing plug at bottom of elbow.
19. Use suction plunger.
20. Re-fastening or re-inserting casters in furniture.
21. Rewire a door bell.
22. Repairing garden hose.
23. Applying paint.
24. How to hang pictures by locating studs.

5. Some Recommended Books

GENERAL PUBLISHING COMPANY - 17 Queen Street East (Less 20%)

The Young Craftsman	Popular Mechanics Press	$2.25
What to Make Vol. 1 to 6 each	" " "	1.75

W. J. GAGE & COMPANY - Toronto (Less 20%)

You Can Make It	Louis V. Newkirk	3.45
Intergrated Handwork for Elementary Schools	Silver Burdett	3.70
Coping Saw Cut-Outs		.80

THE RYERSON PRESS (Less 20%)

100 Problems in Woodwork	2.50
Projects Through Crafts Intermediate	.60
" " " Senior	.60
Toys Every Child Can Make	3.25
Easy to Make Toys	2.50
Model Boat Building for Juniors	2.50

DAWSON SUBSCRIPTION SERVICE

Deltagram Magazine	per year	1.00
Popular Homecraft	" "	2.50

EATONS HARDWARE OR AIKENHEAD HARDWARE

Delta Project Books No's 1 - 14 .15 ea.

These are the cheapest and best books available for workable projects. They contain summaries of projects from the Deltagram magazines.

Modern Projects in Woodwork

Author - Douglass, General Publishing Co.
Many projects children can make.

REFERENCE BOOKS FOR TEACHERS

(1) Hand Woodworking

Authors - Evans, Parks, Slatterie
Contents - Operations In shaping wood, Tools, Joints, Materials.

(2) General Shop Work

Authors - Ashcroft & Easton - MacMillan
Section on Hand Woodwork.

6. Suggested Tool Kit For Junior Woodwork

(1) Crosscut Hand Saw
(2) Claw Hammer - 12 oz. 16 oz.
(3) Stanley Smoothing Plane
(4) Stanley Jack Plane
(5) 6" Try Square
(6) 12" Try Square
(7) Marking Gauge
(8) 3 of ea. 1", ½", ¼" Wood Chisels
(9) 6 Coping Saws
(10) Spokeshave
(11) Backsaw 12"
(12) 6 HalfRound Bastard Files 12"
(13) Oilstone (2" x 10")
(14) Swing Brace - 8" swing
(15) ¼", 3/16", 1/8" Drill and Hand Drill
(16) ¼", 3/8", ½", ¾", 1", Auger Bits
(17) Countersink - rose comb.
(18) 3 Nailsets assorted
(19) Screwdriver - 8"
(20) Mallet - wooden
(21) Bench Hook - right & left hand

The following additional equipment is necessary if the teacher is to provide for a preliminary learning period for observation of each boy before commencing woodwork projects:-

(1) Two or three birch blocks 1" x 6" x 6" with recessed tray shapes in which to form small trays from metal desks. If these are not deeper than ½ inch the metal will not crimp and require annealing (softening by heating).
(2) Two or three wooden mallets made from hardwood blocks.
(3) Bill-nose snips for cutting curves in sheet metal (6")
(4) 1 dozen sheets each of #400 and #250 Emery Paper for polishing plastic ornaments.
(5) Templates - brooch on pendant size for tracing on plexiglass, copper or thin wood.

7. How To Order Lumber

For Ordering Lumber specify:

(1) Kind of Wood desired
(2) Quantity of Board measure or lineal feet
(3) Thickness
(4) Width
(5) Length (If definite lengths are required)
(6) Grade (Quality)
(7) Planed or rough

Example:

Quantity	Kind	Thickness	Width	Length	Grade	Planed
(1) 50 lineal ft.	White Pine	1" x	8"		#1 Common	D 4S
(2) 5 pieces	Bass	½" x	6" x	10"	Clear	D 2S

Note: "D 4S" - dressed or planed 4 sides.

Stock Sizes of Lumber:

Thickness - $\frac{1}{4}$", 3/8", $\frac{1}{2}$", $\frac{3}{4}$", 1", $1\frac{1}{2}$", 2"
Widths - 4", 6", 8", 10", 12"
Lengths - 6 ft., 8 ft., 10 ft., 12 ft., 14 ft., 16 ft.

Note: When lumber is planed or dressed, it loses in thickness and width. Example: A board of a stock size of 1" x 6" would be 7/8" x $5\frac{3}{4}$" when dressed 4 sides.

Shorts: Board ends of 6 ft. or less can sometimes be purchased at a greatly reduced price.

8. How to Order Hardware

NAILS: Common Types: (1) Common Nail
(2) Finishing Nail
(3) Brads (Finishing Nails 1" or less)

Use: Where the nail will not be seen, common nails are used. Where the nail is visible, finishing nails are used. These are usually set beneath the surface and the holes filled. If this is done in the case of a stained job, the putty should be colored to match, by mixing with the correct color in oil.

Order for Nails: 5 lbs. $1\frac{1}{2}$" Finishing Nails
2 lbs. 2" Common Nails

WOOD SCREWS:

Types: (a) Flat Head - Strength, Concealed work
(b) Round Head - For visible work

Wood Screws are made of:
(1) Steel - Strength, Cheapness
(2) Brass - Non-rusting, appearance

Wood Screw sizes are indicated as follows:
(1) According to length
(2) According to gauge number or thickness

Note: The larger the gauge number, the heavier the wood screw.

Order for Wood Screws:
(1) 1 Box (144) Flat Head Steel Wood Screws, $1\frac{1}{4}$" no. 10
(2) 1 Box (144) Brass Round Head Wood Screws, 1" no. 6

SANDPAPER:

Sandpaper is manufactured in different grades, in sheets about 9" x 11". Common grades being:

(1) 2/0 very fine
(2) 0 fine
(3) ½ medium
(4) 1 medium to coarse
(5) 1½ and 2 - coarse

Rules for Sandpapering:

(a) Sand straight with the grain
(b) On flat surfaces always use a flat sandpaper, block under the sandpaper. (7/8" x 3" x 4")
(c) Never sandpaper edges to be glued (This fills the pores of the wood.)
(d) Keep sandpaper in a cool, dry place.

GLUE:

Although there are six or seven types of glue, all of equal strength, the most convenient for small jobs is LePage's Cold Glue.

Rules for use of this Glue:

(1) Both surfaces must be true and free from dirt, grease or oil.
(2) Spread a thin, even coat on both parts with a stiff brush.
(3) Use glue sparingly.
(4) Allow to stand for one day before removing clamps, etc.
(5) Replace lid of the glue tin to prevent drying out, immediately after using.

9. Wood Staining or Painting

Finishing of wood with paints and stains is done for two main reasons:-

(1) To preserve wood. (2) To enchance appearance.

For the amount of staining done in a special class, it would be more advisable to purchase ready mixed than to consider mixing stains, etc.

While more expensive, it is advisable to purchase in one-half pint cans to keep wastage to a minimum.

For most paint work, quick drying enamels are quite satisfactory for finishing coat preceded by "undercoating" of flat paint.

Procedure in Stain Finishing

1. Sandpaper job thoroughly - with grain.
2. Apply stain.
3. Following day apply one coat of shellac.
4. Next day sand lightly and apply second coat of shellac.
5. After one day or more drying rub with steel wool.
6. If you feel job merits varnish apply one or two coats, steel wooling each.
7. Polish with floor wax.

Cleaning of Brushes

1. Shellac Brushes - The shellac can be allowed to harden on the bristles, and softened by placing in wood alcohol when required.
2. Stain, Varnish, Enamel and Paint Brushes can be cleaned with turpentine or washed out with soap and warm water. These brushes should be kept with the bristle section suspended in linseed oil to keep them in a usable condition.

BRUSHES

Kinds, care and use:

A good brush is one made from good bristles (China bristles) that have been well washed, sterilized, and dried, and rubber set.

A good brush must have a proper balance of fullness, elasticity and stiffness, in order to carry and spread the finish.

All good brush manufacturers make a good brush if you pay the price. The common kinds of brushes are illustrated. They come in various lengths and widths of bristle and weight. There are many other kinds for different types of work.

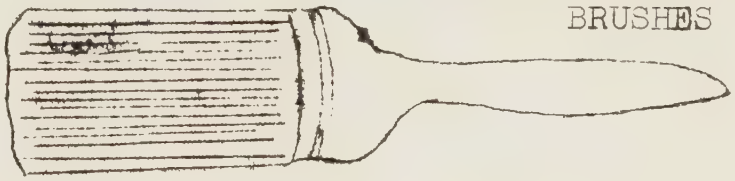
Care and use - Clean all new brushes before using by twirling the dry brush rapidly between the palms of your hands. This throws out all loose bristles. Always break a brush in with linseed oil or an oil base paint, NEVER WITH WATER.

Load a new brush slowly at first. This means do not dip the brush too deeply.

To remove excess paint, never draw a brush edgewise across the pot - ALWAYS FLAT.

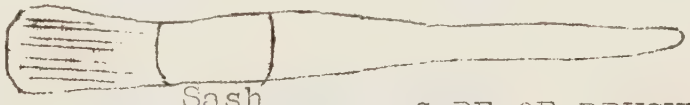
Never use a wide brush edgewise to do a narrow job; use a narrow trim brush.

COMMON KINDS OF BRUSHES



Oval Varnish and Paint

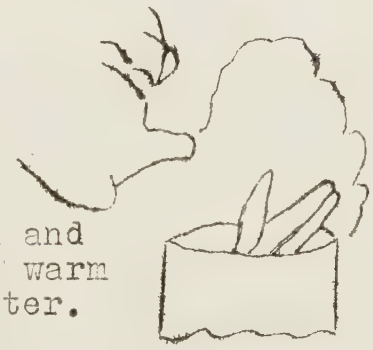
Flat Varnish and Paint



Sash

CARE OF BRUSHES

1. Wash brushes in turpentine or kerosene.



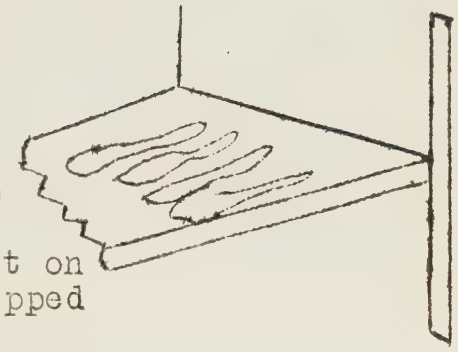
2. Wash and rinse in warm soapy water.

3. Comb bristles straight removing twists and curls.

Never poke or jab a brush into corners, holes, or cracks. It ruins the bristles. Use a smaller brush.

A brush will "fish tail" if you use a wide brush on a round surface.

Never leave a brush standing on its bristle ends. When not in daily use, brushes may be suspended in coal oil for an indefinite period - NEVER IN WATER. Some painters wrap the bristle ends in brown paper, before putting in the coal oil.

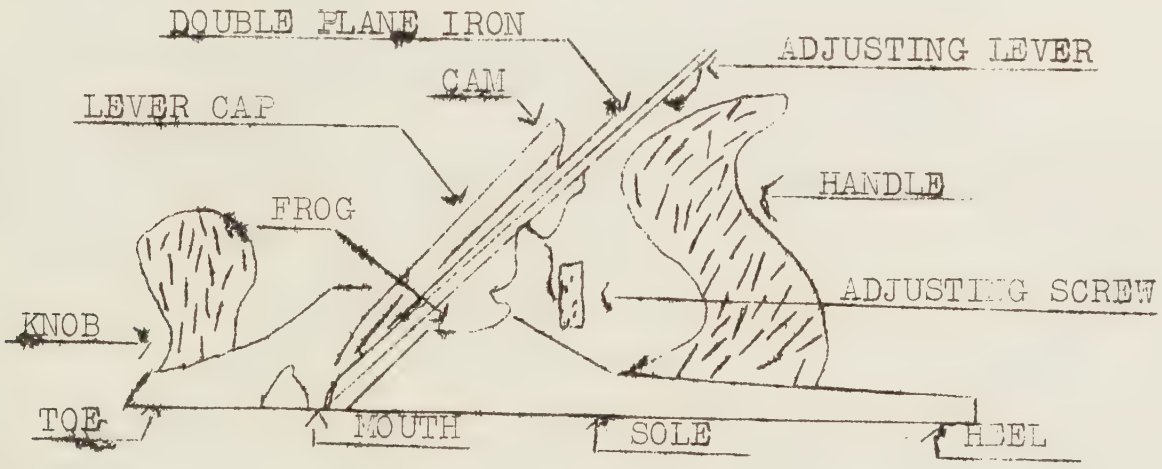


4. Dry and shape bristles. Store flat on shelf wrapped in paper.

To obtain the best results when finishing, one must observe the following rules:

1. Use a good brush.
2. Use the proper brush for the job.
3. Know how to use the brush.
4. Know how to take proper care of your brush.

10. Planes, Saws and Chisels



JACK PLANE - The jack plane is so named because it may be used to do the work of a number of planes. It is a good plane to use for removing rough surfaces and for making surfaces level. It is often used to straighten edges of short boards for joining. It is about 15" long.

SMOOTH PLANE - The smooth plane is about 10" long, and is used for smoothing surfaces which are to be made flat and true.

BLOCK PLANE - The block plane is made in sizes from 3½" to 7" long. It is used for trimming end grain of small pieces. It can be used with one hand while holding the piece against a steady object.

Hand Saws

Common Kinds	Uses
1. Cross cut saws	To cut across the grain of lumber.
2. Rip saws	To cut lengthwise of lumber.
3. Back saws	To cut small pieces of lumber either crosswise or lengthwise.
4. Coping saws	To cut curved lines in thin lumber.
5. Bow or turning saws	To cut curved lines in thicker lumber.
6. Key hole or Pad saws	To cut a pattern, starting from a hole or holes in the lumber.
7. Mitre saws	To cut across lumber at certain angles.

The first two of the above mentioned saws are the most common, and also the most alike. They are distinguished, however, by their teeth; which differ in two ways:-

(1) They are different in shape.
(2) They are sharpened differently.

Rules for Sawing

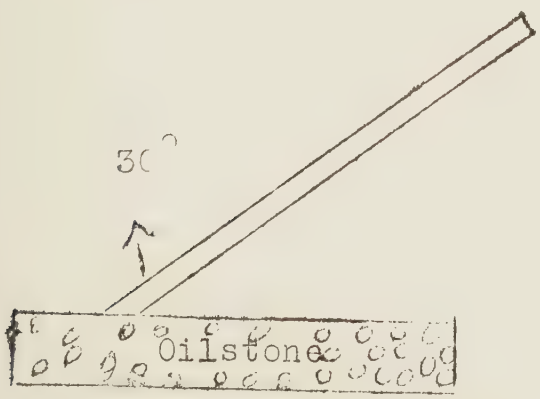
1. Saw on the waste side of the line.
2. RIP before CROSS-CUTTING.

Send for illustrated guide sheets on saws to Henry Disston Saw Co., Educational Dept., Philadelphia, Pennsylvania.

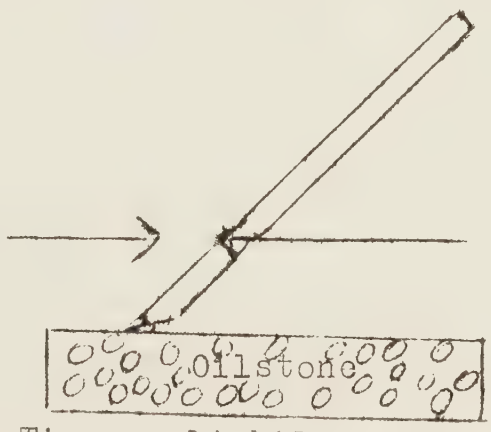
HOW TO SHARPEN PLANE-BLADES, and CHISELS

Oilstoning a plane blade:

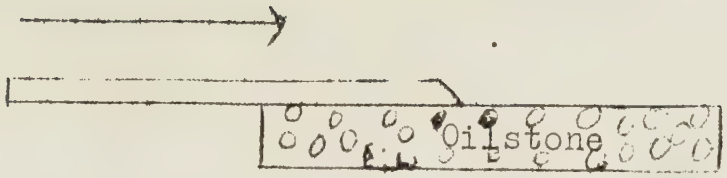
Method of finding the angle at which the blade should be rubbed on the Oilstone:



(1) Place blade on the stone at the angle at which it has been ground.



(2) Tip up slightly so as to work on the tip of the blade. Rub straight back and forward across the stone at this angle.

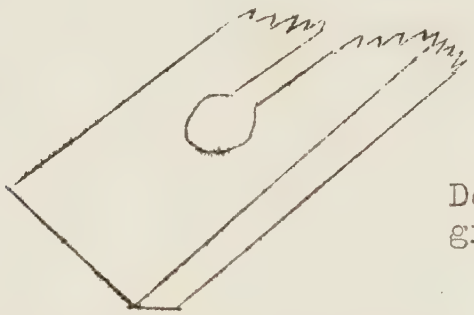


(3) Holding the flat side tightly against the stone, push forward to remove the burr (ragged edge.)

N.B. - Never tip up when in this position. Repeat the operation until the blade is sharp.

<u>When To Have Chisels or Plane Blades Ground</u>:

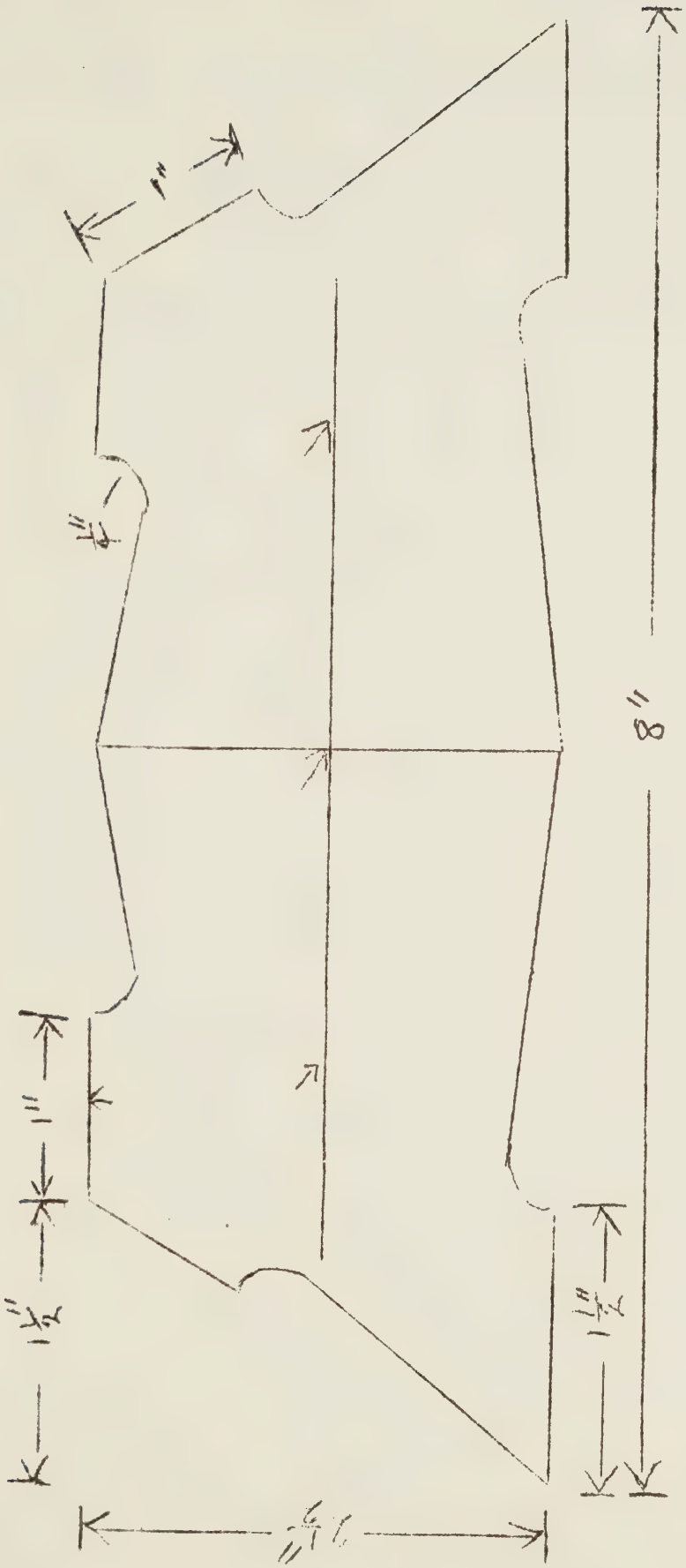
(1) When the angle becomes too large or rounded



Dotted line indicates what grinding would remove.

(2) When blade has been nicked by striking nails, etc.

Note: Grinding should be done by someone familiar with the job.

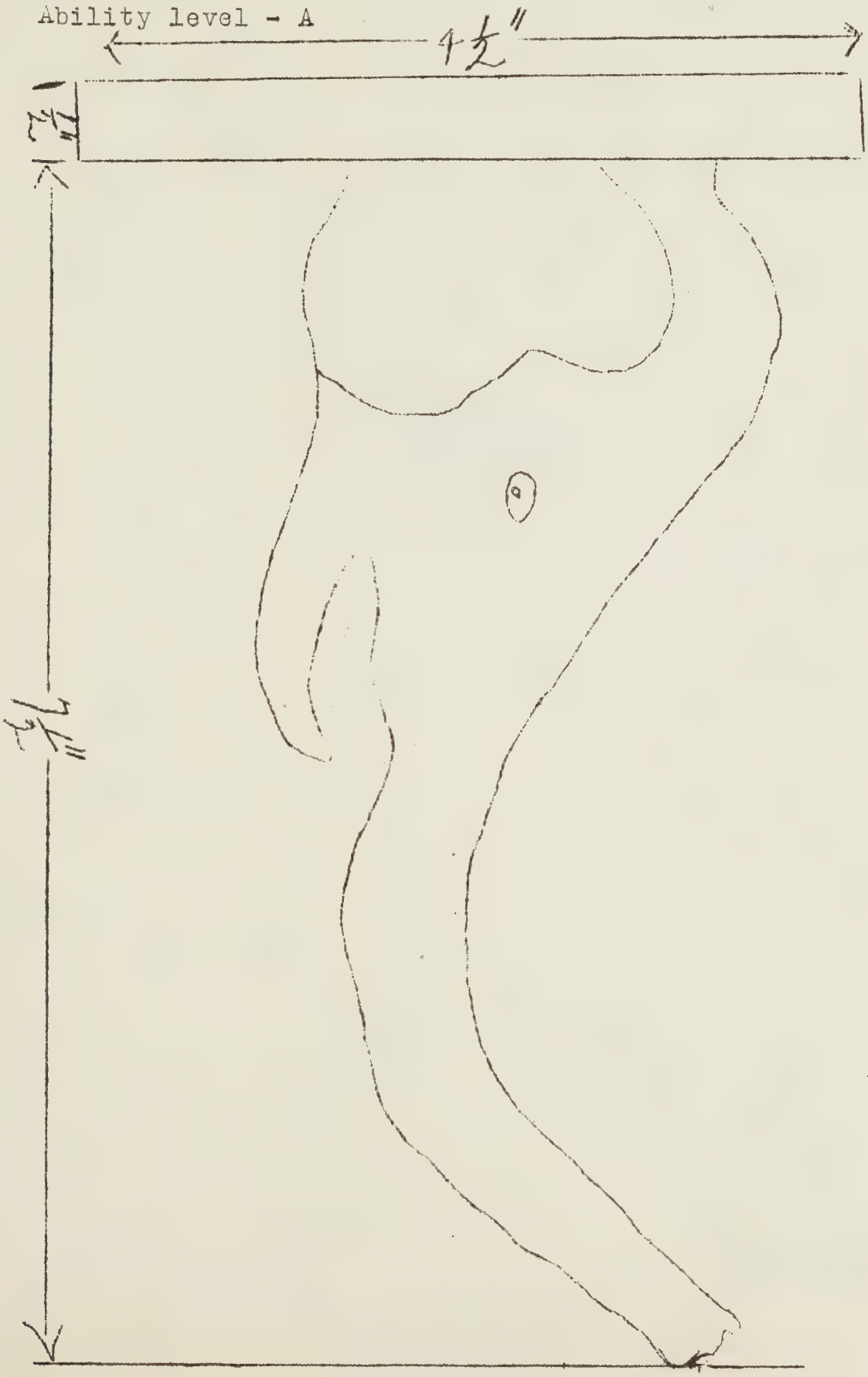

1"
1/4"
8"
1"
1 1/2"
1 1/2"
5 1/2"

ELEPHANT TRUNK TIE HOLDER

Make trunk of 3/8 plywood or basswood. Fasten to back of ½" basswood with 1" flat head wood screws.

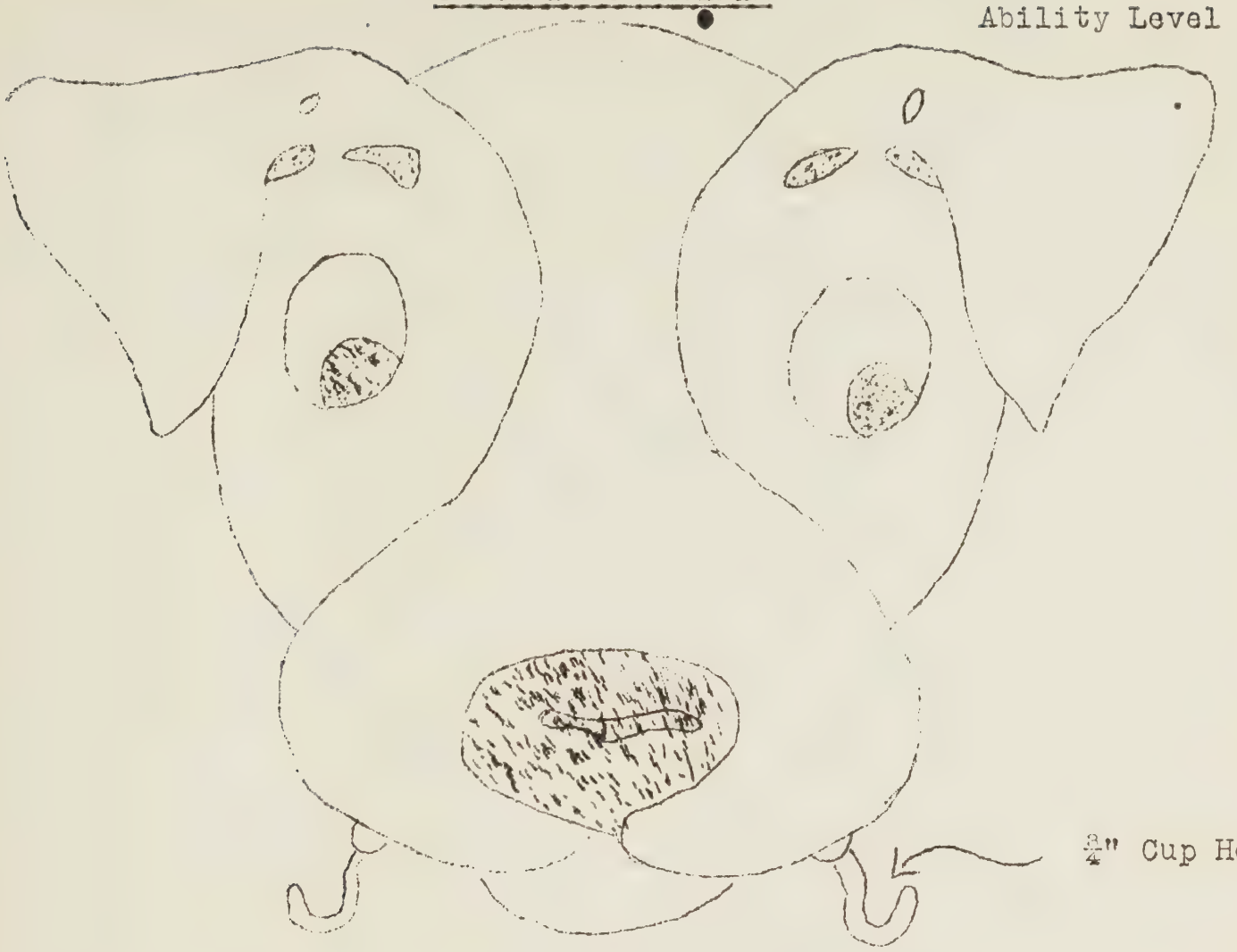
Finish - Outline edges with Asco crayons, also detail lines and finish with white shellac.

Ability level - A

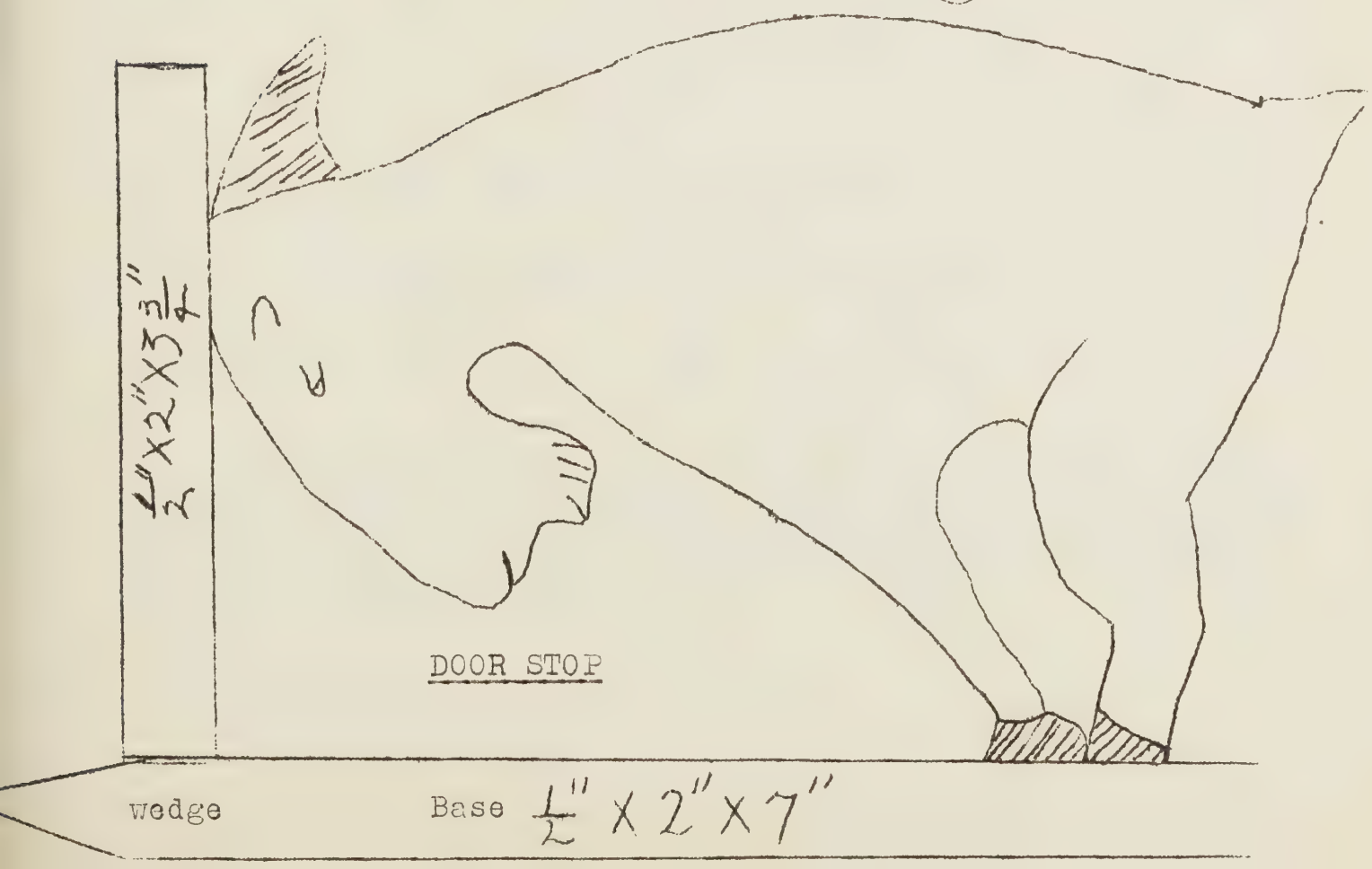


TOOTH BRUSH HOLDER

Ability Level - A

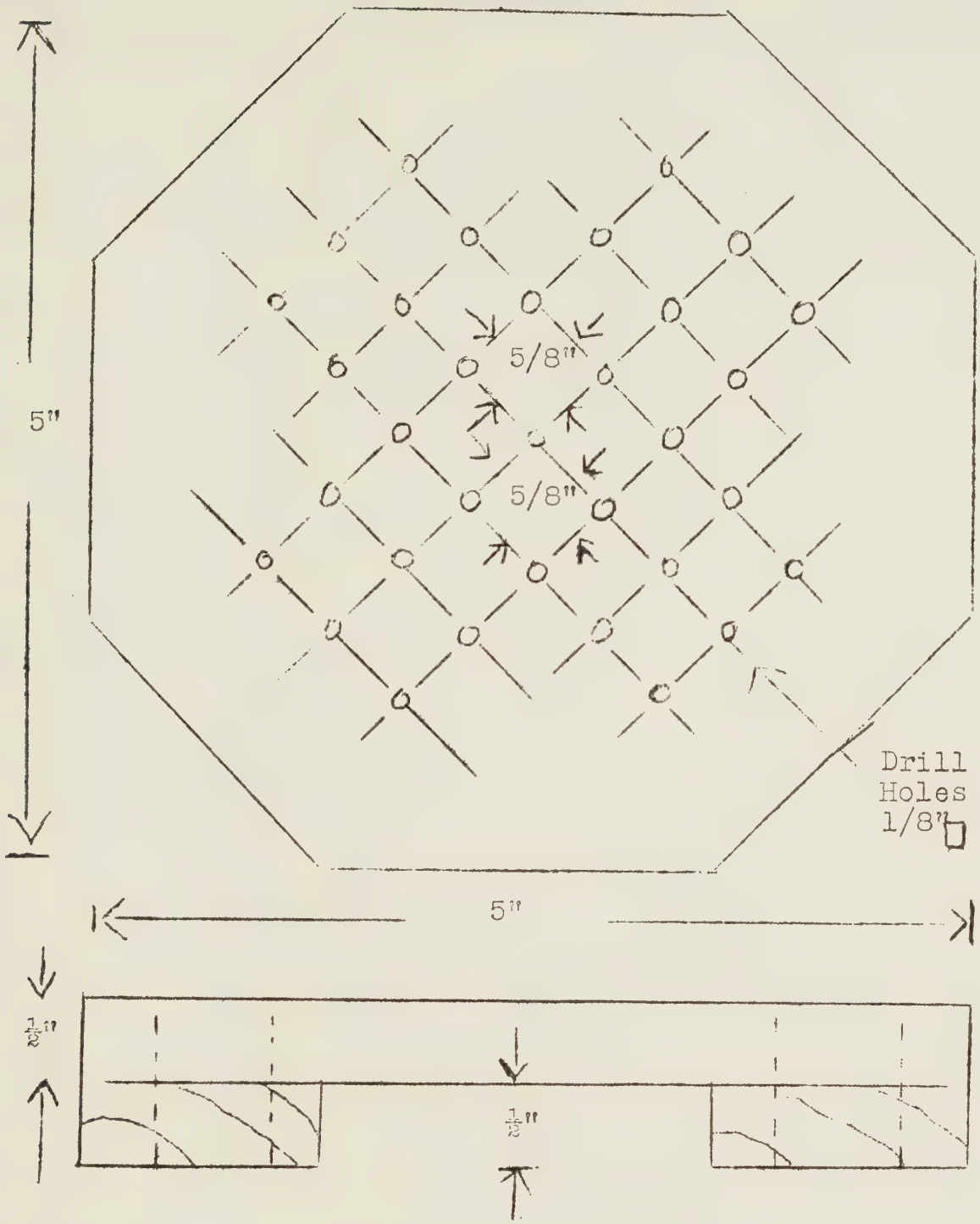


$\frac{3}{4}$" Cup Hooks



A GAME OF SOLITAIRE

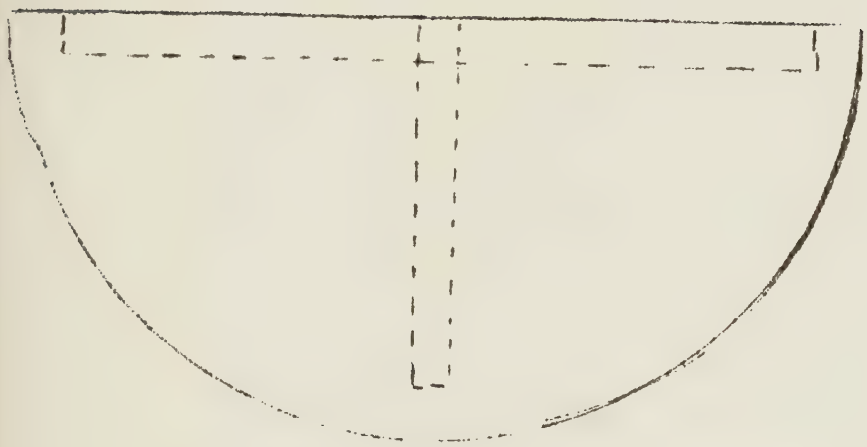
Level B

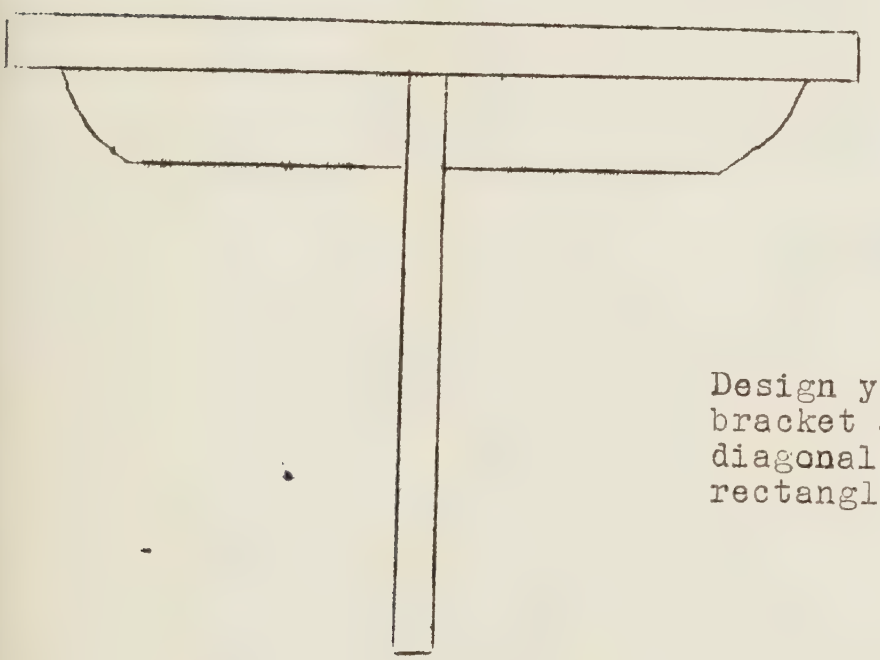


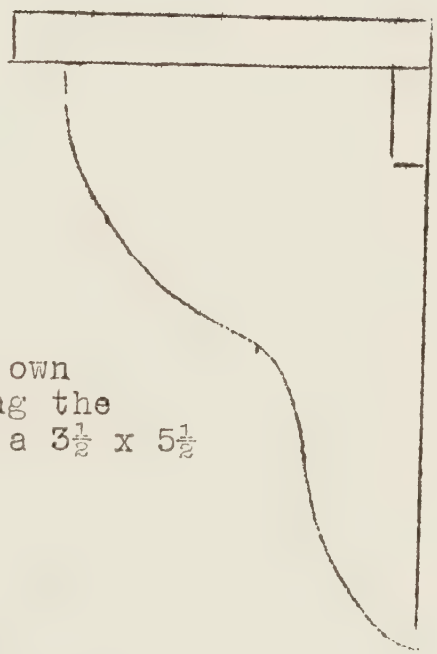
The game requires 32 pegs made from used matches. Start to play by leaving the centre of the 33 holes empty and finish by having only 1 peg on the board in the centre. Move always from full hole to empty, removing a peg with each move, which is along a straight line.

WALL SHELF

Ability Level B





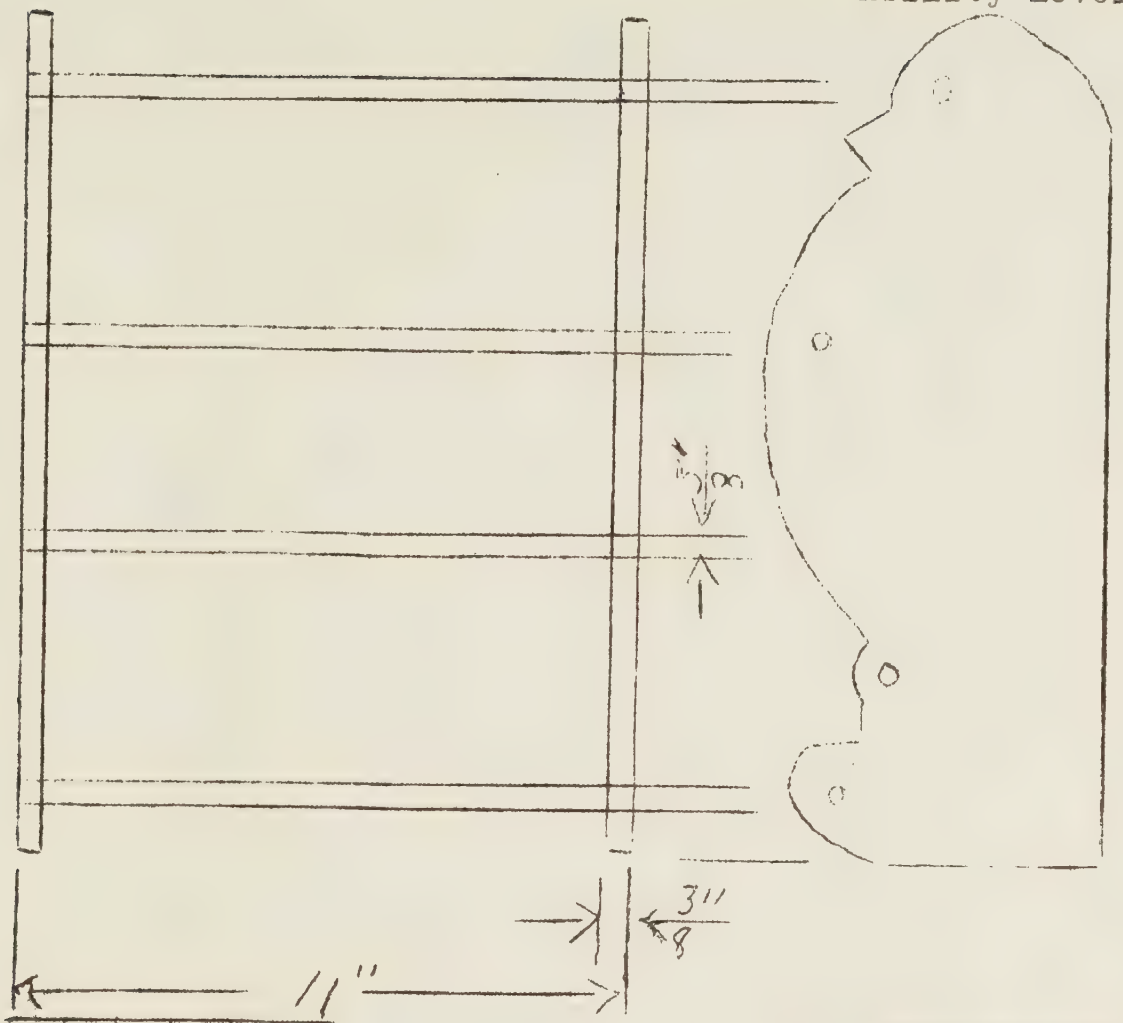


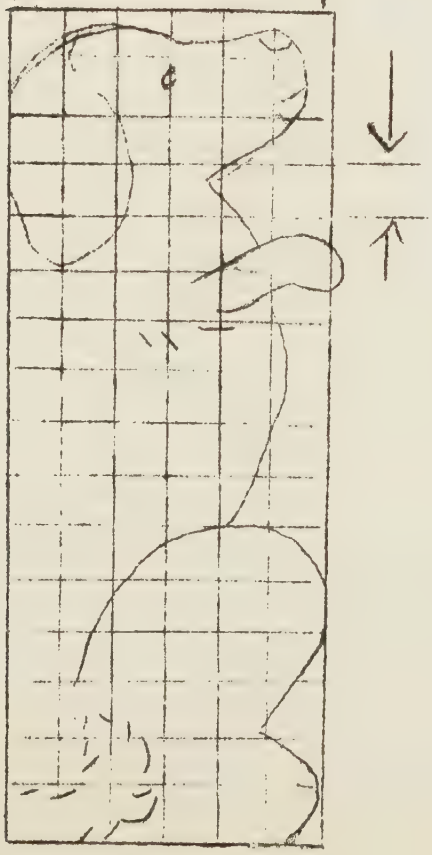
Design your own bracket along the diagonal of a $3\frac{1}{2}$ x $5\frac{1}{2}$ rectangle.

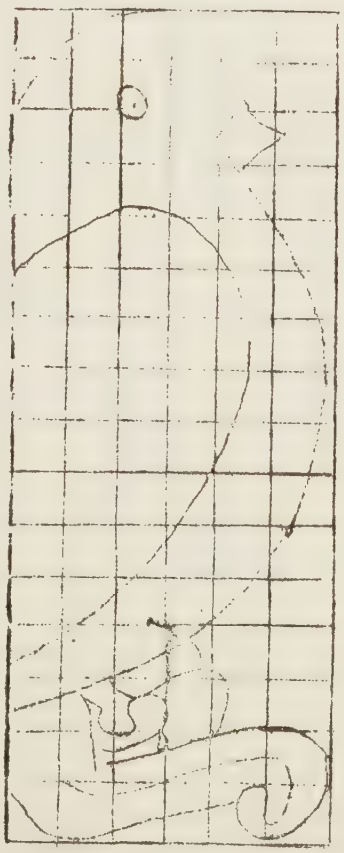
TOP - 3/8" x 4" x 8"
BRACKET - 3/8" x $3\frac{1}{2}$" x $5\frac{1}{2}$"
STRIP - 3/8" x 1" x 7".

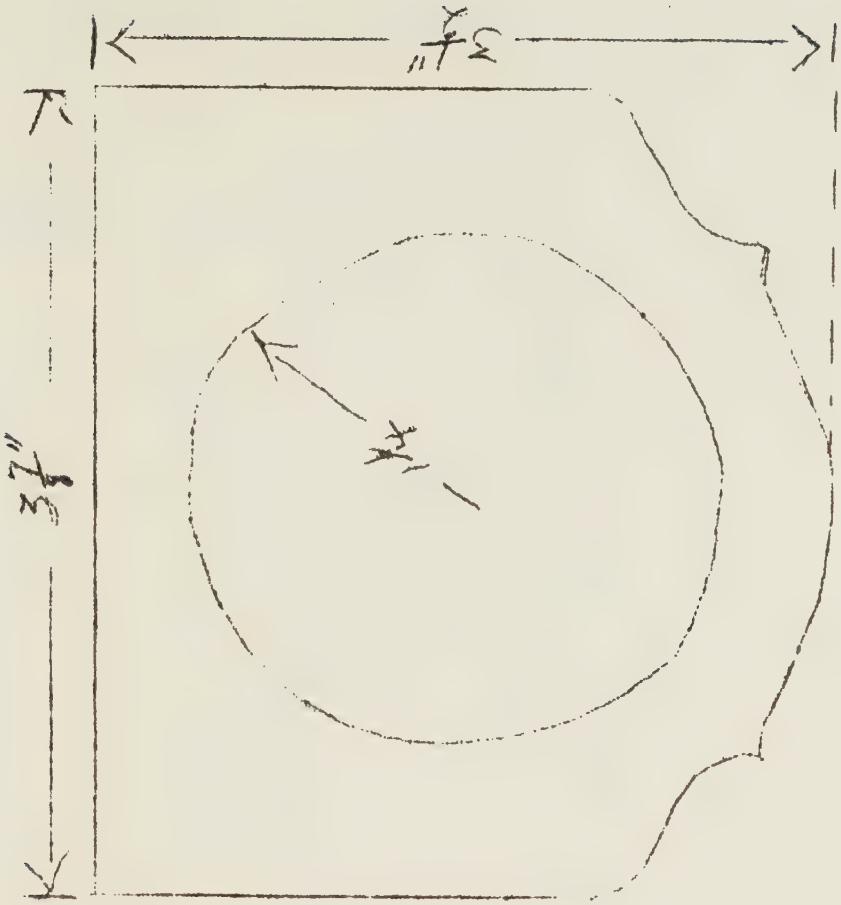
SHOE RACK

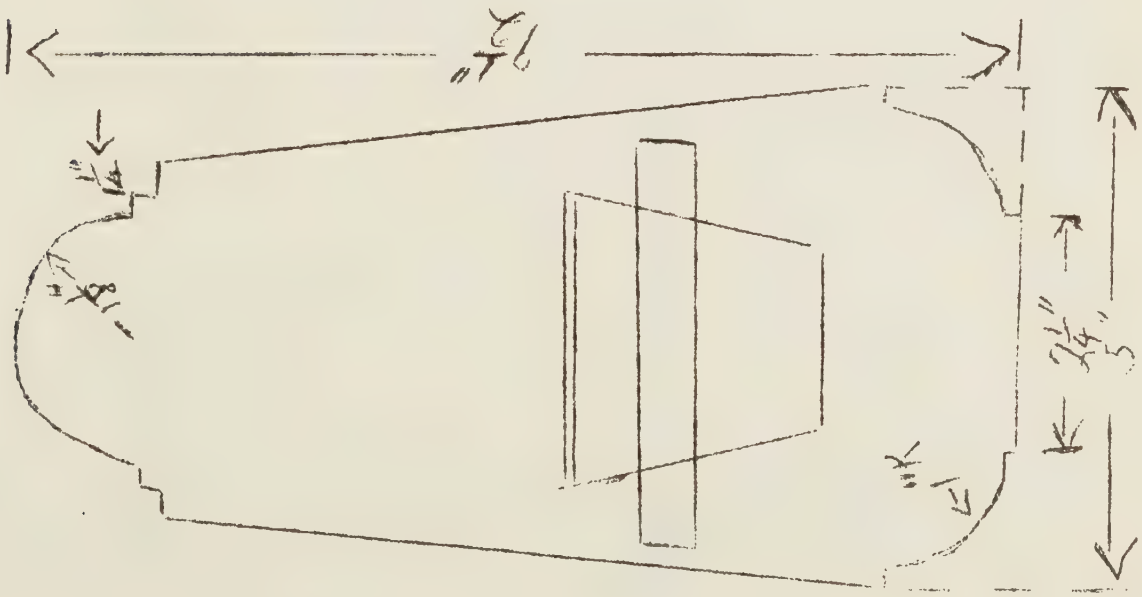
Ability Level - B

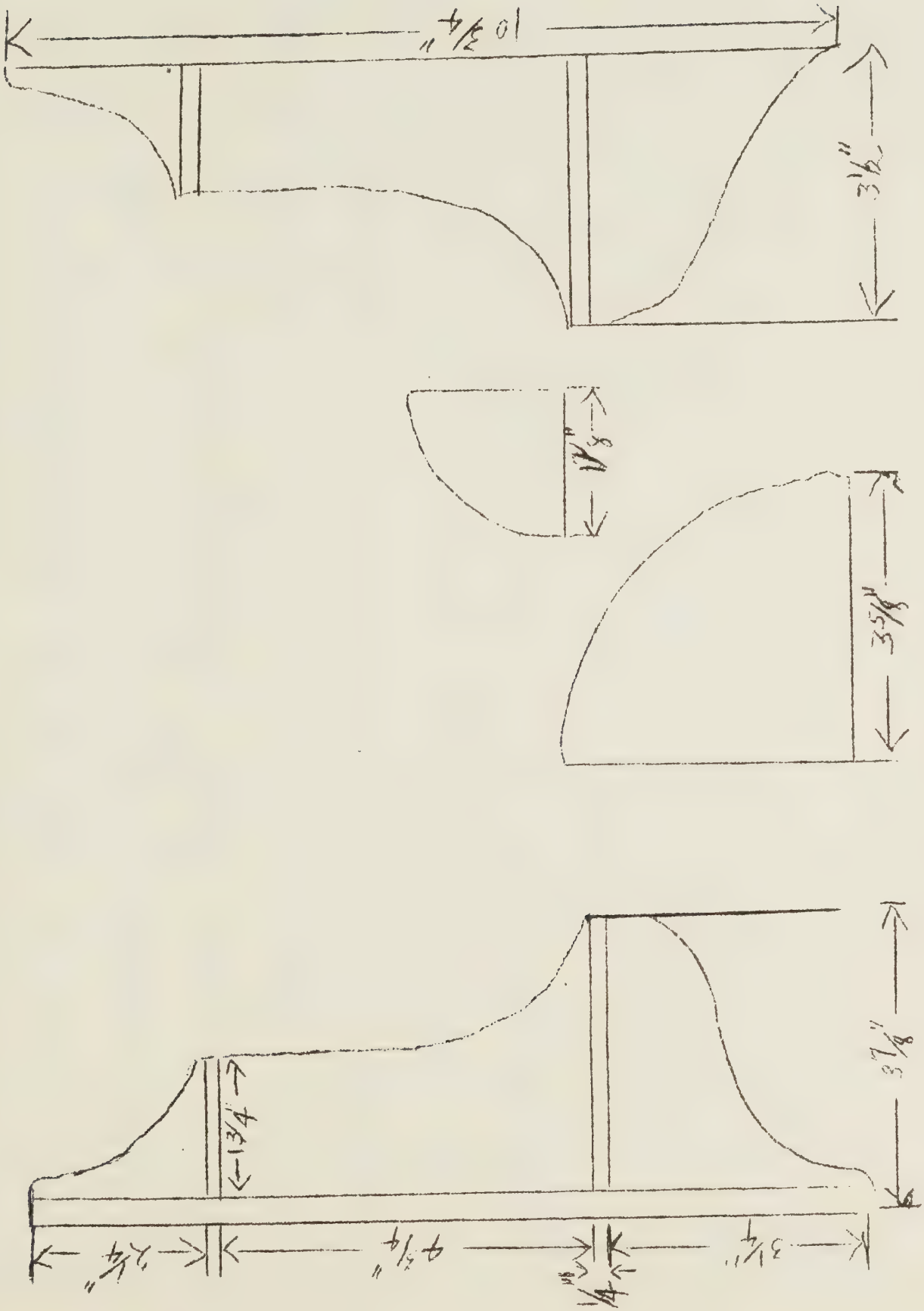


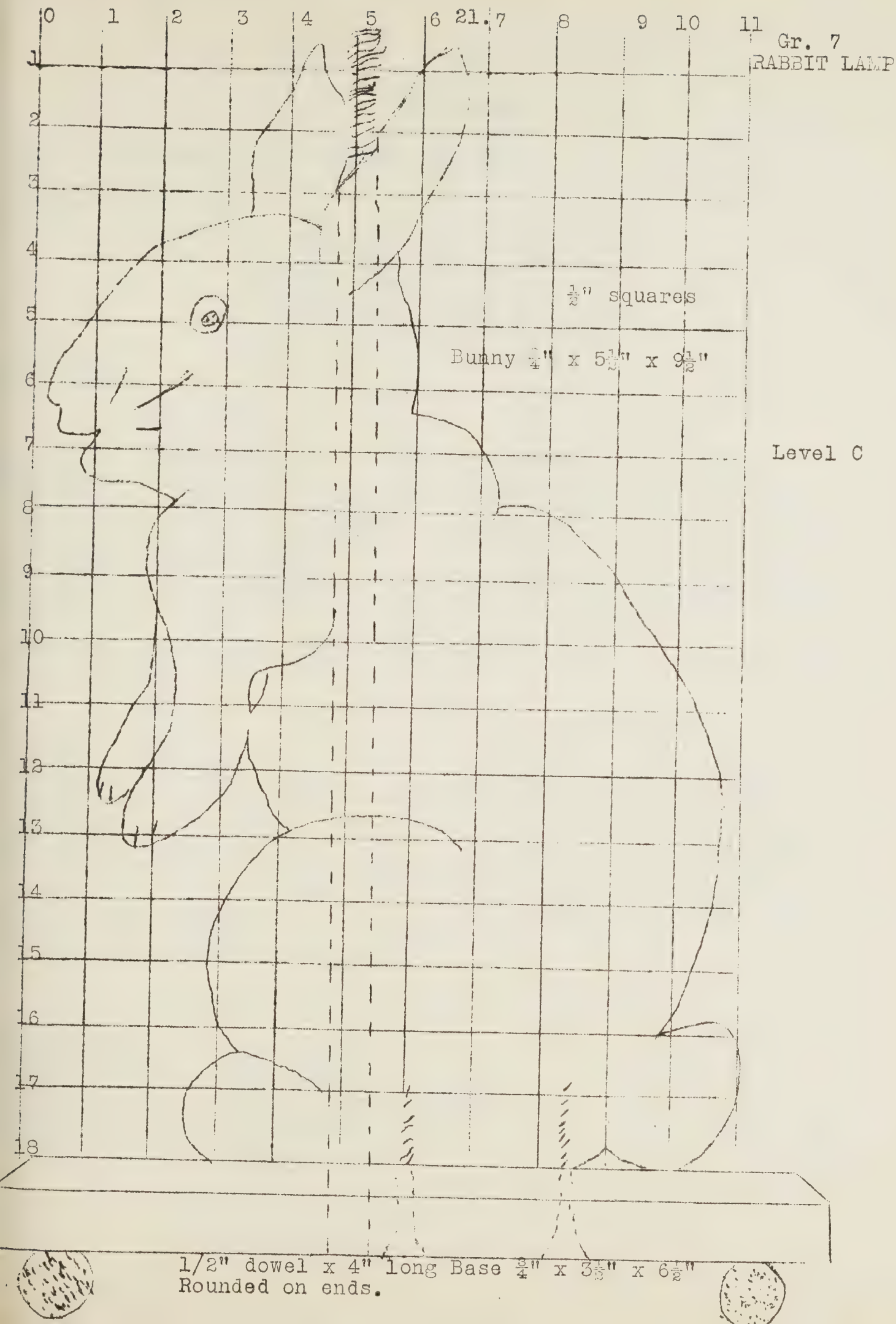









10 3/4"
3 1/2"
1 1/8"
3 5/8"
3 7/8"
1 3/4"
2 1/4"
9 3/4"
1/4"
3 1/4"


Gr. 7
RABBIT LAMP
½" squares
Bunny ¾" x 5½" x 9½"
Level C
1/2" dowel x 4" long Base ¾" x 3½" x 6½"
Rounded on ends.

FOOT STOOL

WOOD - WHITEWOOD - WHITE PINE - BASSWOOD

Materials Required

1 top 7/8" x 10" x 14½"
2 legs 7/8" x 10" x 10"
2 rails 7/8" x 2" x 14"
2 screw blocks 7/8" x 1½" x 7"
12 wood screws # 1½" x 8 Round Head Brass

Operations

Top -

(a) Plane a face edge
(b) Plane one end square
(c) Measure and plane to length
(d) Measure and plane to width
(e) Gauge edge for chamfer ½"
(f) Plane chamfer on ends
(g) Plane chamfer on sides
(h) Sandpaper top and edges

(a) Plane a face edge
(b) Plane one end square
(c) Measure and plane to length
(d) Measure and plane to width
(e) Mark design from pattern
(f) Cut out to shape with coping saw
(g) File and sandpaper to mark
(h) Sandpaper both side surfaces

Note: When unable to obtain wood correct width, 2 pieces may be glued together.

Rails -

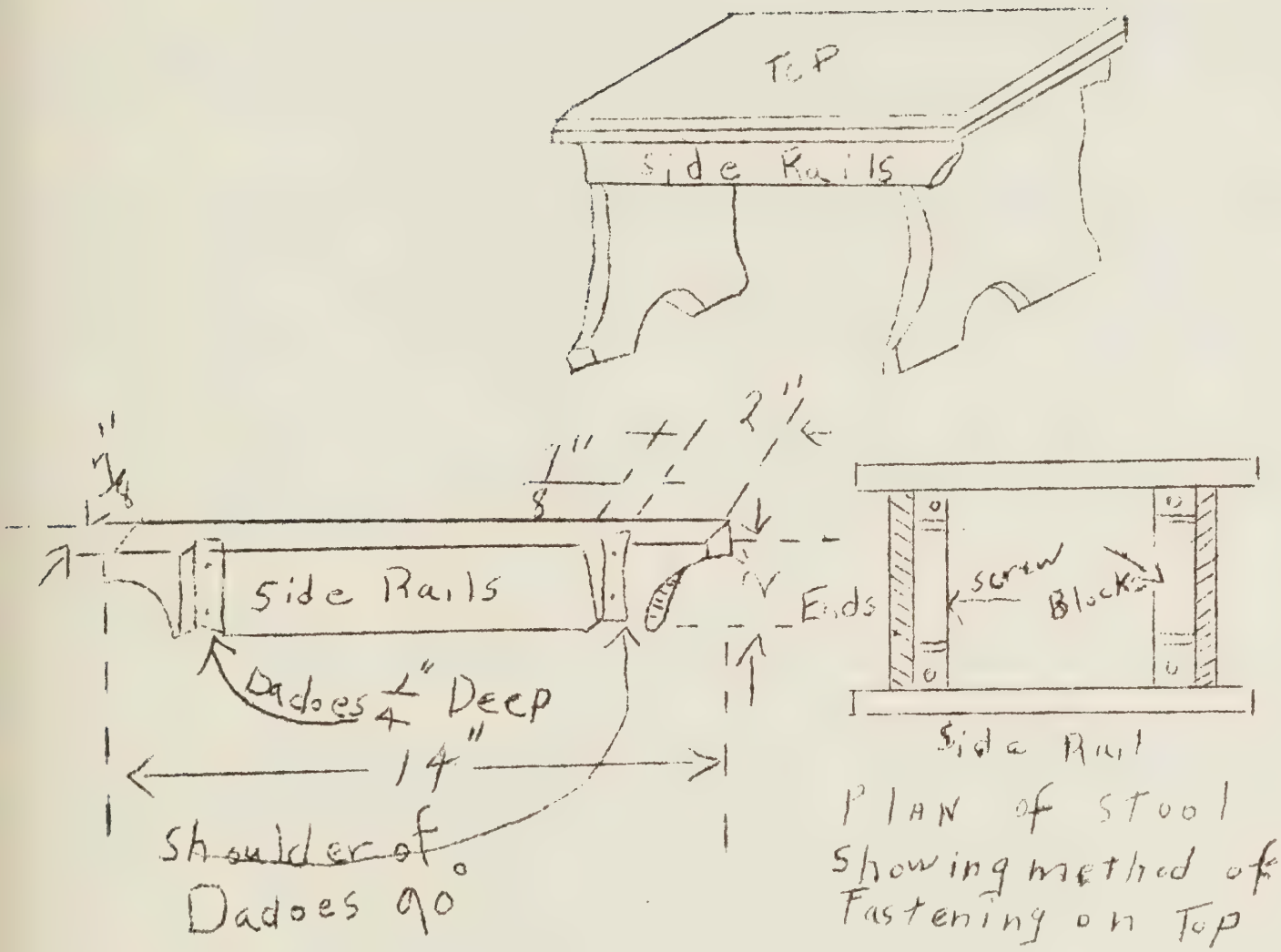
(a) Plane face edge
(b) Gauge for width 2" wide
(c) Plane to width
(d) Saw off to length
(e) Mark design on ends
(f) Cut out to shape with coping saw
(g) File and sandpaper
(h) Mark out dadoes
(i) Cut dadoes (saw and chisel ½")

Assembly -

(a) Bore ¼" holes in dadoes
(b) Glue and screw rails to legs
(c) Set square and allow to harden
(d) Fit screw rails between legs
(e) Glue and screw to legs
(f) Fit top to legs etc.
(g) Screw top through screw rails
(h) Level feet on flat surface

Tools Required -

Jack Plane	Rule
Marking Gauge	Try Square
Coping Saw	Hand Drill
Chisel ½"	Drill 3/16" diameter
Back Saw	Screwdriver
File ½ round	Mallet
	Hammer


Top
Side Rails
2"
1"
Side Rails
Ends
Screw
Block
Dadoes 1/4" Deep
14"
Shoulder of Dadoes 90°
Side Rail
Plan of Stool
Showing method of
Fastening on Top

SOME OBSERVATIONS ON THE WORK OF DR. BERNARDINE SCHMIDT

(A paper presented to the Ontario School Inspectors' Association, April 7th, 1947 by C. E. Stothers).

In presenting this paper to the School Inspectors' Association, no great point is being made of the reported changes in I.Q. Dr. Schmidt reports an average increase of 41 points in the intelligence of 254 pupils over a period of eight years. This is disputed by those who believe in the complete reliability of the I.Q. when it is determined by a competent person.

Dr. Schmidt had the reliability checked by a disinterested psychologist at the 4th, 5th and 6th intervals. This psychologist gives her support to the reliability of the I.Q.'s, but since that same validation is lacking for the 1st, 2nd and 3rd intervals, I leave you to draw your own conclusions.

The testimony of expert observers indicates that superior teaching was done. An examination of letters written by individuals and exercises done before and after adjustment training is cogent evidence of the effectiveness of the teaching. It leaves me of the opinion that these successful methods were employed by an artist teacher and that pupils whose I.Q.'s, as obtained by an individual test, were extremely low, were stimulated to do satisfactory school work and were adjusted socially, personally and emotionally.

Whatever the I.Q. assigned originally, the fact remains that these pupils were in attendance at school and required expert teaching. The evidence shows that they did profit by instruction and gives reason for examining the results and the means of securing them.

Background Data

Before entering into a description of Dr. Schmidt's experiment, I wish to present a picture of our efforts in Ontario along the same lines.

The Auxiliary Education Branch is concerned with the discovery of handicapped pupils, the survey in which their difficulties are measured and diagnosed, and the remedial teaching procedures by which they are adjusted to school and to life. The general pattern which is followed by all special class teachers is

(1) to measure the levels of intelligence and attainment;
(2) to begin instruction at or below these levels with new materials and methods which are not connected with the pupil's previous frustration;
(3) to continue instruction at the pupil's rate; and
(4) to motivate the pupil by arranging for him to participate in activities where he can taste success and achievement.

This pattern has been followed successfully during the more than thirty years since the classes were organized. It is a good pattern for the instruction of normal pupils.

You can note that the pupils are examined prior to their admission to an Auxiliary Class and that there is no stress placed on a subsequent examination. This is probably due to the acceptance of the idea that an intelligence test administered by a competent examiner is infallible and in part to the conditions which prevent these examiners from re-testing pupils who are admitted to Auxiliary Classes.

Examinations are repeated in the cases of pupils whose academic achievement is not in keeping with the prognosis which can be made from the I.Q. Out of these re-examinations came the conclusion that the I.Q. was unreliable only when a physical or emotional handicap prevented the appearance of the real I.Q.

The following cases illustrate this point:

(1) A boy who suffered a severe visual defect showed in successive years an I.Q. which reduced from 115 to 94 to 76. This boy after five years of failure was fitted with glasses and in 2½ months apparently changed from being a non-reader to a pupil who could read at the Grade 6 level.

(2) A boy spent over two years in a kindergarten. Just before he was to be examined as a candidate for exclusion, the speech teacher diagnosed him as severely hard-of-hearing. This explained his unusual responses. In a few months he was both speaking and reading. His physical defect was interpreted as mental incapacity. Later an intelligence examination showed that he had superior ability.

(3) A stutterer was rated as being very dull, yet after his speech defect was corrected, he proved to be exceptionally bright.

(4) Spastics re-examined exhibited a variable I.Q.

There is no general policy of re-examination of handicapped pupils in Ontario mainly because the staff is insufficient. There is plenty of evidence that handicapped pupils are re-adjusted in the special classes and that the graduates are able to take responsibilities far greater than would be expected on the basis of the school records. The Warren Park School Survey and the employment of the graduates testify to the truth of this. This provides us with general results which parallel those reported by Dr. Schmidt.

The year 1946 will stand out in my experience because of the following incidents:

(1) In January Miss Binnie reported the effective use of Strauss Waltzes in Speech Correction;

(2) In March I visited a Winnipeg Endocrinologist who allowed me to look through his photographic records of pupils who were treated at least two years before the onset of puberty. These cases (hundreds of them) showed striking changes such as:-
   1. short children grown to normal size;
   2. fat children grown slim;
   3. undeveloped sex organs developed;
   4. long tongues in infants grown short enough to fit into the mouth;
   5. irregular and undeveloped teeth grown long, regular and perfectly occluded.

Case histories showed that treatment by an endocrinologist had changed withdrawing children into extroverts and failures in arithmetic to success and competence.

(3) The August issue of a popular magazine reported the effectiveness of music in the treatment of imbeciles and spastics;

(4) A December issue of a Toronto daily paper reported Dr. Schmidt had raised I.Q.'s by a technique of instruction;

(5) In February at a conference it was reported that by nutrition failing pupils were able to recover;

(6) The March issue in 1947 continued the 1946 pattern and reported very large gains in the I.Q. by using Glutamic Acid as a brain food.

To sum up this information, it appears that school abilities if not the I.Q. have been changed upwards by
(1) oculists by prescribing glasses;
(2) otologists by prescribing hearing aids;
(3) endocrinologists by prescribing endocrine gland extracts;
(4) musicians who assist stutterers and spastics;
(5) teachers by using experience units;
(6) medical doctors by prescribing brain food;
(7) nutritionists by prescribing food for the growing body.

It makes us wonder why a rather exceptional job could not be done if all of these separate skills could be brought together and applied to our school problems.

The Schmidt Experiment

The Experimental Design

Dr. Strayer surveyed the Chicago Schools in 1934 and recommended:-
(1) Expenditures on books and teaching materials in addition to the usual expenditures on Manual Arts;
(2) A training programme for special class teachers;
(3) An in-service programme for training teachers of the 21,000 handicapped pupils for whom no special provision had been made;
(4) The establishment of centres of 2 - 5 classes for training handicapped pupils - each centre to have a simple shop for boys' woodworking etc. and girls' cooking and sewing.

The Experimental Plan

I. The major objectives of the experiment were
1. The development for feeble-minded adolescents of an educational programme which
   (i) would relieve emotional tensions
   (ii) provide for social interaction
   (iii) develop self-confidence and a feeling of personal worth.
2. The evaluation of that programme in the light of personal, social and intellectual behaviour and change in that behaviour during an in-school period and a post-school period.

II. The children in this study were 322 boys and girls between the ages of 12 and 14 years in 5 special centres for the feeble-minded. They had been placed in these special centres on the recommendation of the Child Study Bureau of the city schools on the basis of the following criteria:-
1. Classroom Teacher's Judgment
2. A chronological age of 12 years or more
3. An intelligence test yielding an I.Q. of 69 or less.
4. Sex - because centres were planned for boys only or girls only - The original centres A and C were coeducational.

Altogether there were 102 boys and 220 girls classified as feeble-minded, studied in this report.

Dr. Schmidt indicates that the results of intelligence tests may have been severely lowered by handicaps of vision, speech or hearing or by temporary physical or emotional aberrations and for this reason the special placement may have included some whose "feeblemindedness" was more apparent than real.

Three centres were experimental and included 254 pupils. Two were used as Controls and included 68 pupils.

For the evaluation of the study three controls were used:
(1) The classes in Centres D and E - where there were no boys;
(2) Paired identical twins in experimental and non-experimental centres; (4 sets)
(3) Paired identical twins in experimental centres and in regular classes (4 sets of female and 3 of male twins).

The study continued over a period of eight years in which three years was spent in instruction in a special class and the pupils were followed through a five-year post-school period.

Tests Used

(1) The Stanford Revision of Binet-Simon Tests
(2) Terman-Merrill Revision, Form L
(3) Stanford Achievement Battery, Forms V, W
(4) Bernreuter's Personality Inventory
(5) Pintner's Aspects of Personality
(6) Willoughby Emotional Maturity Scale
(7) Vineland Social Maturity Scale
(8) Detroit Adjustment Inventory.

These tests were administered at entrance and at each 18 month interval.

An alumni association was organized at the suggestion of the children. This group met at one another's homes every two months as a social gathering with refreshments and entertainment planned by the host or hostess. These group meetings were used by the investigator to gather information in the post-school period.

At the end of the experiment, data was missing on 15 cases for the following reasons:
(1) 12 boys were in the armed forces
(2) 2 girls had moved to other states
(3) 1 girl died of tuberculosis.

General Method of Investigation

Individual case histories were developed for each of the children beginning at the time of enrolment and including
(1) family background and social history
(2) previous school history
(3) reports of general health and physical defects
(4) results of standardized achievement tests and clinical tests of intelligence
(5) measures of personal and social competency.

Behaviour Problems Presented At Enrolment

Impertinence	16	Resentment	4
Shyness	14	Unstable emotions	3
Defiance	13	Inferiority	2
Truancy	13	Social immaturity	2
Stealing	10	Disobedience	2
Introversion	10	Delusions	1
Sexual delinquency	9	Deceitfulness	1
Poor nerve control	7	Dope user	1
Egocentric	7	Poor muscular control	1
Smoking (girls)	6	Daydreaming	2
Lying	5		134
Frustration	5		

Mechanisms Used by Children in Meeting Conflict Situations

Fears	86		
Compensation	44	Direct Response	23
Timidity	41	Phantasy	17
Negativism	28	Projection of blame	15

Racial Extraction

Italian	81	Jewish	9
Polish	56	English	9
German	38	Norwegian	8
Czech	14	French	3
Roumanian	13	Mexican	2
Irish	10	Scotch	1
Greek	10		254

20 were Anglo-Saxon with English certainly the mother tongue.
Over 90% were of European stock other than Anglo-Saxon.

Incidence of Physical Defects

Vision	121	Crippling Defects	3
Dental	43	Thyroid	3
Hearing	41	Epilepsy	2
Anaemia	39	Chorea	2
T.B.	21	Asthma	1
Speech	9	Poliomyelitis	1
Cardiac	7	Puberty	1
Spasticity	5		299

59 or 27% of the girls) 44 or 43% of the boys) were free from physical defects

299 had physical defects.

The Educational Programme

The purpose was to provide school experiences which would help boys and girls in school and prepare them for competent social adjustment in post-school years.

To achieve these broad aims the instruction was directed towards
(1) developing desirable personal behaviour
(2) improving the fundamental academic skills
(3) developing the manipulative arts
(4) improving work and study habits
(5) learning occupational and vocational information
(6) giving pre-employment experience.

General Instructional Method

Instructional Method used in the educational programme can be characterized best by the following major emphasis:-
(1) group planning
(2) group experiences
(3) in-school reproduction of situational experiences
(4) the use of the creative and manual arts.

Units of work were first requested by individual pupils and then considered by the group and accepted or rejected according to the total interest in the problems suggested. In order to merit presentation of his desires to the group, each individual was required to be able to state at least three reasons why he selected the particular topic.

Group consideration was given first in the group meeting, and then in meetings of smaller groups throughout the following week. By the end of that period the group came together under the direction of the head teacher to make a selection of the topics previously suggested.

The following week was devoted to small and large group planning in which the children presented the questions or problems they considered important in working out the unit. They also suggested activities they wished to undertake. By the end of the second week, it was the responsibility of the head teacher to bring together all teachers and pupils to discuss the plan of the unit she had worked out from their suggestions. Following this meeting with the inclusion of their revisions and additions, the unit was ready for use as an outline to be modified as and if advisable.

A great part of the initial two-week period was spent in general discussion and oral exploration of the problem. Some use of books and pictures was included in an attempt to determine the specific questions that were included, and the extent of the problem. The introductory learning period was an extension of this two-week selection period. It was a time for general learning on many phases of the problem.

The teacher set aside special selections of books -- set up displays of pictures, diagrams, leaflets, clippings and pamphlets -- selected and showed moving picture films, slides and stereoscopics. The final event of the introductory period was the first field trip. By this time the class had sufficient knowledge of the problem in hand to profit by discussion and factual organization which preceded the actual excursion.

Following the first trip motor activities were expanded and reproduction and dramatization began, with an increasing variety of individual small and large group projects, initiated and completed by the pupils and all integrated with the central problem of the learning unit. This was the primary learning period in which the acquisition of the skills related to the problem became imperative and compelling. Especially in the activities developed around dramatization and reproduction, the pupils became increasingly conscious of their inadequacy in these skills, for these inabilities hampered the completion of the project they had undertaken.

The third and final period of the programme was rich with academic and motor activities which summarized the growth and development which had been achieved both individually and as a group. This period of the programme was most valuable for the organization and classification of new concepts which grew out of the study. The activities during this period differed from those of the earlier learning periods, in that they showed a clearer definition, a greater completeness, and a wider comprehension of the problem, the development of which was the original objective.

Units

(1) Finding Our Way Around Chicago
(2) Making Slides
(3) W ires and Bells
(4) Making a Telephone
(5) Making and Working Puppets
(6) What Am I like
(7) May I Help You
(8) Let's Dine Out
(9) America's Our Country.

The Organization of an Experience Teaching Unit

(This is a resume of a complete description from the doctorate thesis).

The topic around which a teaching unit was organized came out of the needs of the pupils. The unit "Finding Our Way Around Chicago" was developed because most of the pupils were totally unfamiliar with usage of the transportation system. They needed to know directions and the amount of fares. Only three had visited the neighbourhood park. None were familiar with stores or shopping centres in their home communities.

The teaching unit was organized as follows:

(1) The aims of the teaching unit were stated as outcomes of the needs.
(2) The lessons to be taught in Reading, Arithmetic, Social Studies, Art and English were next set out in detail.
(3) Under "Materials" the following were listed - (a) 13 books
(b) 28 motion pictures
(c) 35 Stereopticon slides.
(4) Under "Activities" the following were outlined:-
(1) Excursions - (a) Tour of School
(b) A Trip to a park
(c) A street car ride to the library.
(2) Academic - (a) Discussions
(b) Oral Composition
(c) Reading lessons
(d) Free reading
(e) Writing up booklets
(f) Planning trips to places of interest (furnish schedule and per person costs)
(g) Collecting and keeping account of notes from parents and payment of fare.
(3) Motor - (a) Dramatic play of original sketches on safety
(b) Printing charts of original stories
(c) Wall frieze
(d) Pupil-made slides
(e) Cover design for booklets
(f) Bookbinding
(g) Relief maps
(h) Pic torial maps
(i) Dioramas.

Specific Skills In The Tool Subjects

1. The reading of signs, labels, and notices and the interpreting of the continuous paragraph - reading at Grade 4 level.
2. Legible Writing - not necessarily conforming to any handwriting scale.
3. The spelling of words in ordinary daily usage and a general spelling vocabulary equivalent to Grade 5 on a standard spelling scale.
4. Addition and subtraction of 4 column figures.
Multiplication by 3 digits.
Use of fractions 1/2, 1/8, 1/16 in practical usage.
Use of decimals for money computations.
Use of per cents in discounts and interest.

Functional Arithmetic

problems of buying for the home;
selling over department and food counters;
simple linear, dry and liquid measurements;

problems in home repairs, sewing and carpentry;
use of measurements in cooking and quantity marketing;
simple family budgeting.

Manipulative Arts

1. Ability to use simple tools;
2. Making simple electric repairs - (replace fuse, repair plugs, mend wires)
3. Simple dressmaking and plain sewing;
4. Ability to use ordinary cooking equipment and care for it;
5. The use of common household appliances (washing machine, mangle, vacuum cleaner);
6. Using hands and fingers for manual work requiring some dexterity;
7. Using hands for active leisure time pursuits in arts or crafts for personal values.

The fashioning of novel belts, necklaces, purses and hats provides training and pleasure in achievement for girls.

Achievement At End of In-School Period

1. Part-time positions held by 87 children

Domestic Service	19
Dep't Store Clerks	12
Typists	9
File Clerks	8
Nursery Assistants	3
Drug Store Clerks	8
Service Station Attendants	28
	87

2. Improved personal adjustment was indicated by
   (a) increased range and quality of leisure time pursuits;
   (b) improved personal appearance;
   (c) responsibility for grooming.

3. They showed gain in academic skill in the tool subjects averaging 3 years and 8 months in the 3 year period. The greatest gains were in the first 18 months.

4. Methods used in meeting conflict situations showed a tendency towards more frequent use of direct responce rather than the use of substitute mechanisms.

5. Their activities indicated increased emancipation from home and family pressure, greater self-responsibility, ability and willingness to serve in positions of usefulness to others, and growing ability to get and keep part-time employment.

Inventory of Book Selection At Enrolment

(1) Dick Tracy - (Comic)
(2) Lone Ranger - (Comic)
(3) Tarzan (In Quest of Treasure) (Comic)
(4) Flyin' High - (Comic)
(5) Snow White and The Seven Dwarfs
(6) Heidi
(7) Jimmy Allen, Secret Operative (Comic)
(8) Janet Hardy In Hollywood
(9) Happy Days

Inventory of Book Selection At Close

(1) Little Women
(2) The Pool of Stars
(3) Tom Sawyer
(4) Heidi
(5) The Prince and the Pauper
(6) Under The Lilacs
(7) Little Men.
(8) Dr. Doolittle Series
(9) Rebecca of Sunnybrook Farm
(10) Anne of Green Gables
(11) Little Colonel Series
(12) The Wonderful Adventures of Nils.

The Post-School Period

I Of the 254 children included in this study, 216 or 87% continued voluntary training beyond the compulsory school attendance requirements - 27% graduated from a high school course (not an academic course).

II Distribution of Final Jobs

(a) Semi-Skilled - 73
(b) Skilled - 41
(c) Clerical - 67
(d) Casual - 73

III Occupational Status of Pupils At Close of Study

	Boys	Girls	Total
Employed	81	132	213
Military Service	15	0	15
In School	4	2	6
Married (not employed)	0	9	9
Idle permanently	1	0	1
Idle temporarily	0	8	8
Deceased	1	1	2
	102	152	254

IV Wages - Girls - $10 - $64 Average $23.50
Boys $ 6 - $84 $32.00

V On The Bernreuter Scale

254 tested at 4th interval - 41st p.centile
195 5th interval - 56th "
100 6th interval - 13th "

VI Mean Reading and Composite Achievement Levels for Experimental and Control Groups

	M.A. Grade Expected	Grade Level Achieved
Experimental	2.0	5.9
Control	3.6	2.2

The Control Group of 68 Girls

(1) None merited certificates at end of 3 years
(2) 9 were employed at some time in the post-school period - Average 3 months.
(3) 8 girls bore children out of wedlock.
(4) the employed group averaged $8.75 per week.

The Experimental Group of 64 Girls

(1) 23 earned certificates at end of 3 year period.
(2) 88% continued voluntary education.
(3) 54 were employed - average 9.7 months.
(4) the employed group averaged $16.25 weekly.
(5) 1 girl bore a child out of wedlock and subsequently married the father.

Contacts of Community Social Service Agencies With Experimental and Control Groups

	Exp.	Control
Medical Clinics and Hospitals	3	6
Behaviour Clinics	0	5
Juvenile Court	1	16
Special Schools and Institutions	0	4
	4	31

All court cases were for sexual delinquency.
All 4 institutional cases were for residence in hospitals for the insane and for the feeble-minded.

Twins

I The following is the reaction of Mary, one of a pair of twins on being told that the retests in the post-school period were for the purpose of measuring differences which had come about:- "I'm not the same person as I was; not the same girl; I do different things now; I feel different when I meet people; I don't say the same things; How could I write the same answers in a test? I am different now."

II Twins In Experimental and Control Groups

The R Twins - Jessie and Jacqueline - the only children of a relief family where the parents were H.S. graduates -

Both girls were excessively shy and retiring and seemed content to be with each other. They enjoyed helping mother clean house, but could not do this work competently. Jacqueline read at a poor 1st grade level and Jessie was able to use an easy 2nd reader. Jessie at 13 years 7 months had an I.Q. of 61 - M.A. 8 years 2 months. In the special centre she was given opportunity to learn rug and basket weaving with some stitching since it was believed that she was achieving at a level close to her expectancy in reading. Five months after placement she began to be truant from school and upon repeated offences and reprimands was placed temporarily in the Detention Home. She continued school for one year and 3 months, when she dropped out and refused to continue. She did not get a job, but helped her mother keep house and beyond that spent most of her time at the movies.

Jacqueline examined at 13 years 6 months was rated as having an M.A. of 5.2 and an I.Q. of 42. She entered Centre A (Experimental Group) the first time she had been at school without her sister. She was most unhappy and fearful and seemed afraid to trust herself to attempt even very simple tasks -
on Vineland Social Maturity Scale - S.Q. - 74
on Bernreuter ranked in 67 p.centile neuroticism; 80 p.centile introversion.
on Willoughby Emotional Maturity 6 p.centile.
Her reading achievement was practically nil. She had no sight recognition vocabulary and attempted to "sound out" every word she met even at pre-primer level. She was easily fatigued by this procedure. Her entire language programme was undeveloped and her arithmetic did not go beyond simple counting.

Her first attempts at group work were brought about by making stereopticon slides. The materials - glass, water colours, tape, etc. were in various places in the room. The children were told to go ahead with their first attempts after the process had been explained and after they had seen slides prepared by other children. Jacqueline appeared as if she would get up to get the materials but then sat back passively. She did this again and then said to the teacher "Do you mean I should walk over and get the glass myself?" From this point she gained more assurance and became increasingly confident until she contributed most freely to projects and activities. Her skill in the tool subjects increased and by the last term she was president of the Book Nook Club, the "reading circle" of the centre and enjoyed

discussions with other members of the club of the books they had read. After finishing Murkerji's "Gay Neck" she returned for another book "by the same man 'cause in "Gay Neck", one reason I liked it was I could almost see the pictures when there wasn't any.

After three years in the experimental class Jacqueline transferred to Grade 8 from which she secured her elementary certificate at the end of the term. She secured a position as packer at $23.00 per week. After a little more than a year she was made inspector in the shipping department at $35.00 per week. Less than a year after graduation she entered the evening sessions of an academic high school and at the close of the study had completed two years of a commerce curriculum.

Measures changed as follows:

Bernreuter Scale

	Per centiles
(1) Neuroticism	66 - 63 - 32 - 4 - 5
(2) Introversion	79 - 61 - 17 - 12
(3) Stanford Binet	42 - 68 - 70 - 84 - 89.

Composite of Tables XXXVI and XLVII Showing Change in Intelligence Quotients

Classification	I.Q Range	Test I at beginning	Test 2 at 18 mos.	Test 3 at 36 mos.	Test 4 at 54 mos.	Test 5 at 72 mos.	Test 6 at 90 mos.
Idiot	0 -24	0	0	0	0	0	0
Imbecile	25-49	88	18	3	3	1	0
Low Moron	50-57	55	28	9	5	4	3
Middle Moron	58-62	49	44	33	11	8	2
High Moron	63-69	62	115	43	27	7	3
Borderline	70-79	0	35	117	76	51	7
Dull	80-89	0	13	32	88	61	29
Low Normal	90-99	0	1	17	36	56	36
High Normal	100-110	0	0	0	4	11	29
		254	254	254	250	199	109

Dr. Schmidt's Thesis indicates the advisability of the following improvements in our plan:

(1) increase the use of the experience unit;
(2) retests of the pupils before graduation;
(3) employment of the very best teachers.

Auxiliary Education Summer School Pamphlets #1

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Lecturer in Remedial Teaching

SOME MANUAL DEXTERITY
and
MECHANICAL ABILITY TESTS

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CONTENTS

Chapter I

The Value of the Tests

During recent years, personnel managers in large industrial firms have found that manual dexterity and mechanical ability tests are valuable tools in their equipment for selecting workers to do specific jobs. The worker's task is analysed and then tests are chosen or constructed to measure the ability to perform the required operations. Each specified task often requires a special skill which is sometimes possessed by most but not all people while other tasks require a special skill which is possessed or can be developed by only a few people. These tests, therefore, are used to sort out workers with special skills and to place them where their abilities will find greatest scope for satisfactory expression as well as contribute most to the production of the factory.

In the field of education, these tests can be used as part of a counselling program whereby the student can choose more intelligently a school or a course of study which can give him a successful and pleasant experience as well as fit him more quickly for the vocation in which he can find satisfaction.

In the counselling work of our schools, paper tests are used extensively, and, for the child of normal academic attainments, they are more expeditious than the individual test. But, with the academically retarded child, whose difficulty often lies in the field of reading, they are quite unsatisfactory. For the retarded group, then, we must use tests with a minimum of reading or verbal instruction if we wish to secure a fair estimate of the child's ability. This is true for both mental and special ability tests.

Very few of the special ability tests have been used extensively enough to establish norms or to give a fair estimate of what a good score on the best means in terms of success expectancy in any defined course of study. This booklet, therefore, is written to encourage the study of special abilities among the retarded or slow learning adolescents and to find some means of locating and using these abilities to better advantage. At Jarvis School for Boys, in Toronto, we found five tests which, when used as information in completing a comprehensive study of the boy's interests and activities, were instrumental in reducing the number of unsatisfactory shop choices, made by the boys, from 28.7 to 4.1 per cent.

A description of four of these tests is given here with directions for administering and scoring. These tests may be copied and used. However, the directions should be followed carefully.

It would make the interpretation of the scores on these tests more valuable if the teachers using them would send the scores to Dr. C. E. Mothers, Department of Education, Toronto. The form suggested here would be a convenient and satisfactory way in which to forward the scores.

Teacher: School:

Name of Test: Date:

Pupil's Initials	Age Years Months	I.Q.	Raw Score	Skills at which student excels

Chapter II

A Bolt and Nut Assembly Test

Description:

The Bolt and Nut Assembly Test consists of twelve bolts and nuts which can be re-assembled into four sets of three identical bolts and nuts. The three nuts of a set can go on the three corresponding bolts in the set, but will not fit the other nine bolts. The bolts and nuts used were three cap screws for each of the following sizes: 3/8 x 24 N.F.; 5/16 x 24 N.F.; 3/16 x 16 N.C.; and 5/16 x 18 N.C.

Directions:

Place the bolts and nuts, in a well mixed pile, on a table in front of the student.

Instructions to the Student:

"This is a test to see how quickly you can assemble the twelve bolts and nuts so that the bolt just shows through the nut. (Demonstrate) They are not all the same size and all the nuts will not fit the same bolt, although all the nuts go on the correct bolt easily and do not require forcing. Ready, go!"

Start the watch when he picks up the first nut and stop it when the last nut is on correctly.

Scoring:

Allow three trials. The score is the average time in seconds taken to assemble the bolts and nuts.

Chapter III

A Mechanical Assembly Test

Description:

The Mechanical Assembly Test contains some items from both the Stinquest and the Minnesota Mechanical Assembly Tests. The sixteen items listed in Table I are taken apart and placed in the sections of the box indicated in Figure 1. The lid of the box is used by the student as a work table on which to assemble the articles.

Directions:

The box containing the unassembled articles is placed on a table directly in front of the student, with the hinges towards him.

Instructions to the Student:

"Do not open the box until told to do so. In the box you will find some common mechanical articles that have been taken apart. In each compartment there are all the parts belonging to an article. You are to take the parts and put them together as you think they should be. When the box is opened the lid forms a tray in which you may work. There is a screwdriver in section nine which you may use when needed.

"You will be allowed twenty-five minutes to complete the task. Assemble the objects in the order they are placed in the box. Begin at number one, and, as soon as you finish it, go on to number two, and then number three and so on until you finish all of them. Work as fast as you can but do not break the parts. If you are unable to assemble an object correctly, leave it, and you may have time to return to it when you have completed the remainder. When I say 'go' open the box and start to work at number one. Ready, go!"

The time for the test, including directions, is about thirty minutes.

Scoring:

Each item is scored according to the number of parts put together correctly. For example, the "Wing Nut", item one, has three parts. If no parts are assembled correctly the score is 0; if two parts are assembled correctly the score is 4; and if the three parts are assembled correctly the score is 10.

Table I. Mechanical Assembly Test

Name of Article	Parts	Score
1. Wing Nut	3	0-4-10
2. Castell Nut	3	0-5-10
3. Pencil Sharpener	3	0-5-10
4. Glass Knob for Drawer	4	0-5-8-10
5. Hinge	3	0-6-10
6. Clothes Pin	3	0-5-10
7. Paper Clip	3	0-5-10
8. Gillette Razor	4	0-4-8-10
9. Pliers	4	0-4-8-10
10. Push-through Brass Socket and Bulb	5	0-3-5-8-10
11. Attaching Plug and Screw Plug	4	0-4-8-10
12. Ceiling Rosette	3	0-7-10
13. Compasses and Pencil	6	0-3-5-6-8-10
14. Chain Links	6	0-2-4-6-8-10
15. Mechanical Pencil	5	0-3-5-8-10
16. Spark Plug	6	0-2-4-7-9-10

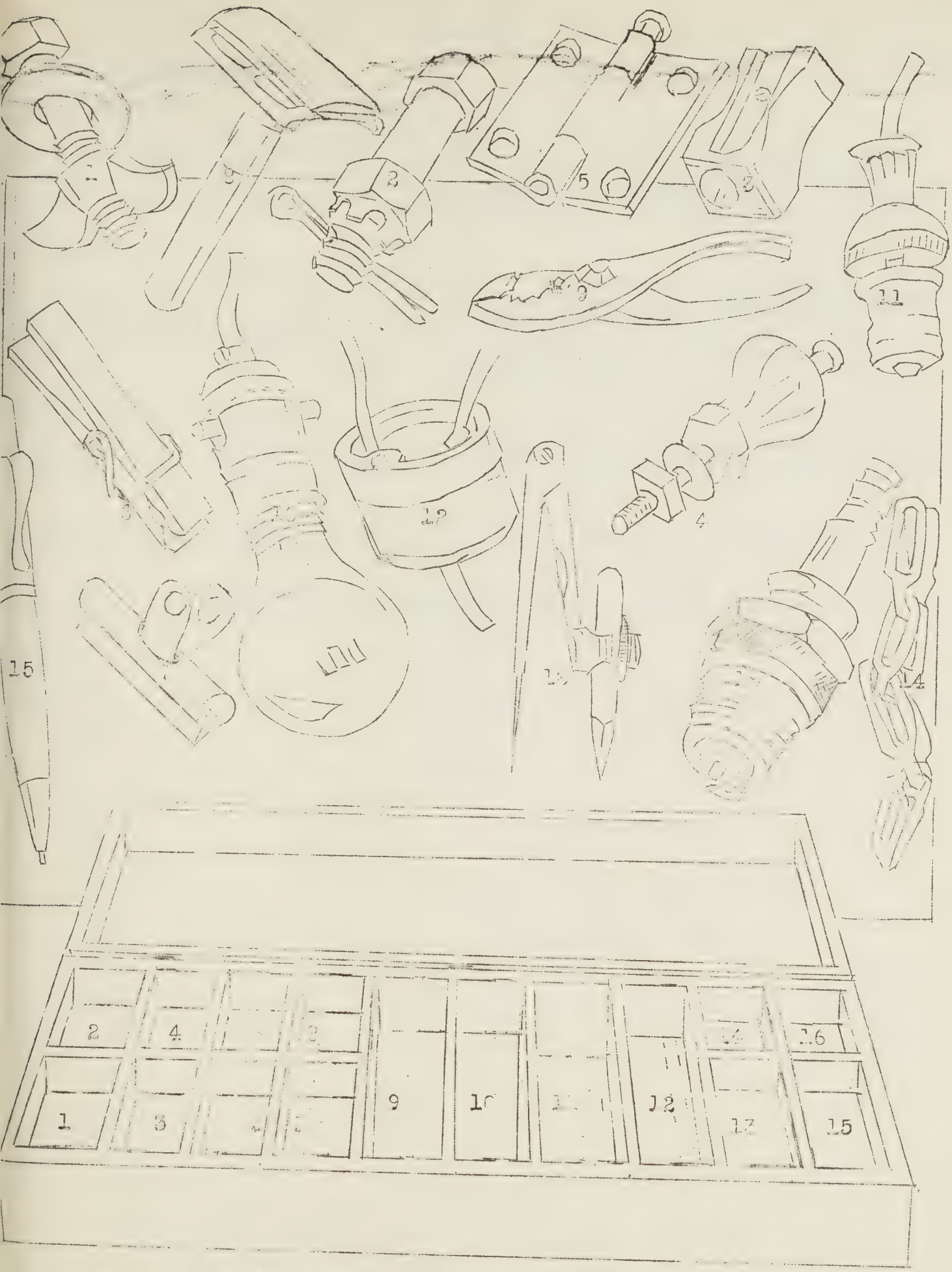


FIGURE 2 [illegible] MECHANICAL ASSEMBLY TEST AND BOX

Chapter IV

A Spacial Relations Test

Description:

The two boards, $13\frac{1}{2}$ inches by 9 inches, with holes cut through them as indicated in Figures 3 and 4, were constructed from three-eighth inch mahogany and stained dark. The blocks, twenty-five in number, cut to fit into the holes in the boards, were made from half inch mahogany and painted white.

Directions:

Board B (Figure 4), with the letter on the side farthest from the student, is placed on a table, the blocks put into it, and then pushed back the width of itself from the edge off the table and lifted. The blocks are now in position for board A (Figure 3), which is placed between the blocks and the edge of the table. The student now sits in front of the test.

Instructions to the Student

"Put the blocks into their proper places in the board. All blocks fit into their correct holes easily and require no forcing. Use both hands and work as quickly as you can. Ready, go!"

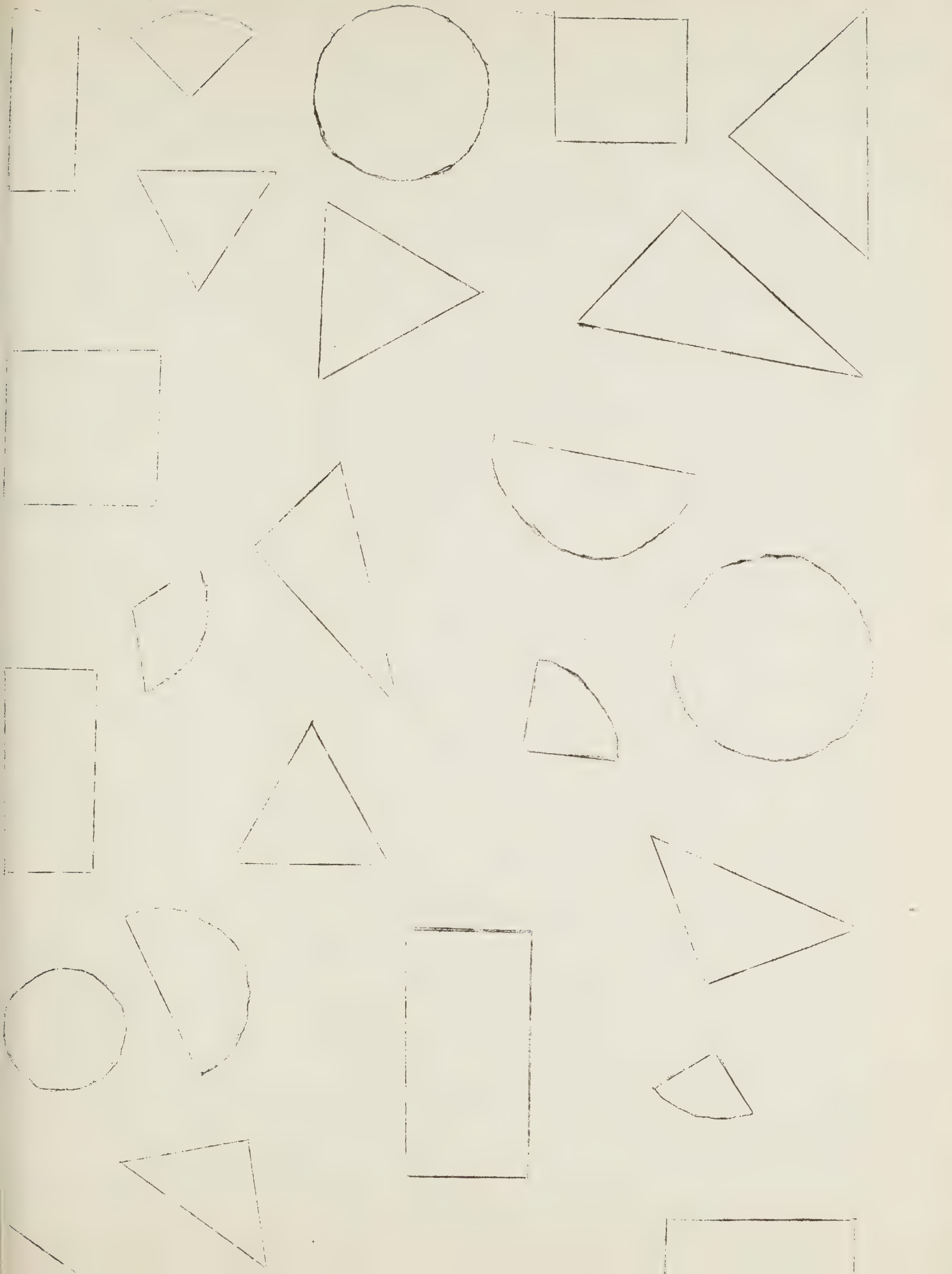
Start the watch when the student picks up the first block, and stop it when the last block fits in correctly.

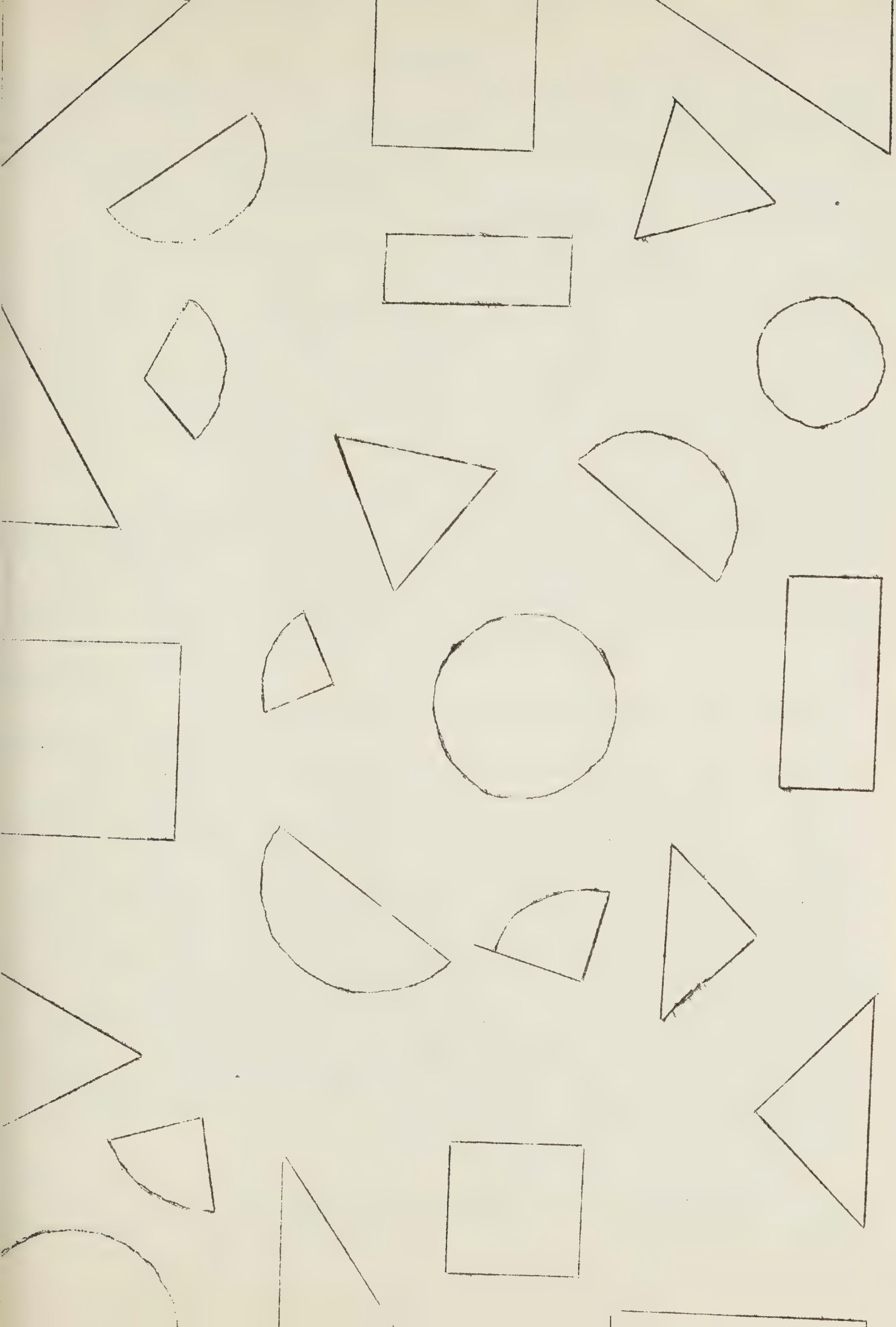
Push board A back its own width and lift it. Place board B between the blocks and the edge of the desk, and repeat the test.

Scoring:

The score is the average time in seconds taken to place the blocks correctly.

Figure 4. Spacial Relations





Chapter V

Wiggly Block Test

escription:

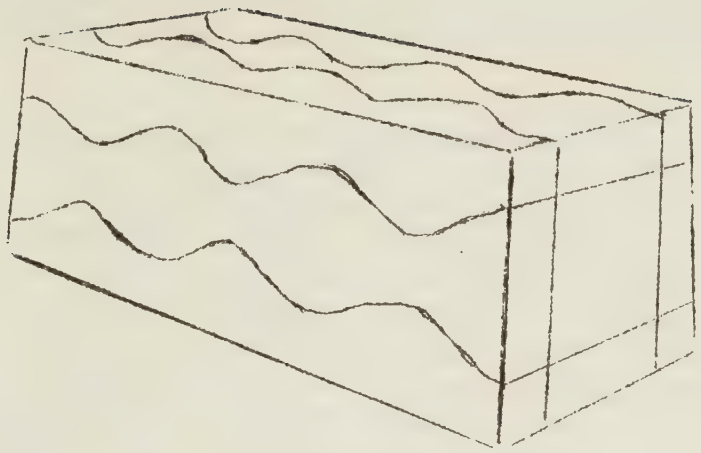


Figure 5. The Wiggly Block

The Wiggly Block was first used by Johnson O'Connor,)'Connor, Johnson, Born that Way. Baltimore; Williams and Williams 1926. Pp. 323.) ıe block illustrated and used here is not identical with the O'Connor Block. It is ven and three-quarter inches long, three and seven-eighth inches wide by three ıd seven-eighth inches high. It can be made in a wood-working shop by cutting a ne block of correct size through from top to bottom with a band saw as illustrated the drawing. Then it is turned on its side and cut through again as illustrated. ch of the nine parts is painted black on all sides and ends.

rections:

Place the block on a table in front of the seated student.

structions to the Student:

"This block is made up of nine pieces like this. (one of e top corner blocks is then taken in the hand, and shown to the student.) I will k them up, and let you put them together again. (Replace the block.) Notice refully how it is made. It is cut through into three piles, with three blocks in ch pile. (Separate the blocks into three vertical piles, three blocks in each. ve your hands down as if cutting them throughtwice. Push the three piles together ain, making the block as originally assembled.) It is also cut through into three vers with three blocks in each layer. (Remove the top two layers of three blocks ch and place them on the table beside the bottom layer and a few inches from it. en remove the top one layer of three blocks from the middle layer, and place it so it the three layers are arranged before the student in this order - bottom, middle l top. The three blocks in the lower layer are separated, left for a moment, and en pushed together again. 'In the same way the three blocks in the middle layer are arated; and then the three in the top layer. Then they are re-assembled.) ıember that it is three blocks high and three blocks wide. Now I will mix them up, see how quickly you can put them together. (Mix the nine blocks thoroughly, ning any three end for end, and leave them all in a parallel row.) Ready, go!"

The student is allowed ten minutes to work on the block.

ring:

Allow three trials. The score is the average time in seconds en to assemble the block correctly.

Chapter VI

Interpretation of Scores

The percentiles given here were calculated from the scores of at least 150 adolescent boys whose I.Q. range was from 60 to 100 with 52 per cent. in the 70's. Each boy was doing satisfactory work in one of nine shops. These shops were the art, automobile, machine, printing, shoe-repairing, sheet-metal, tailoring, wood-finishing and wood-working shops. In Table VI, the "shop suggested" refers to one of these nine shops.

Generally speaking, a percentile of 60 or better on both the Mechanical Assembly Test and the Spacial Relations Test was evidence that the boy could do satisfactory work in any one of the mechanical shops such as the automobile, machine, sheet-metal and wood-working shops. Other experiments substantiate this prognostication. "The Minnesota Mechanical Assembly Test and the Minnesota Spacial Relations Form Boards are at present the most dependable performance tests for use in measuring mechanical aptitude. On either of these tests, a Standard Score of less than 5.0 may well be construed as a precautionary signal." (Bingham, Walter V. Aptitudes and Aptitude Testing. New York: Harper and Brothers Publishers, 1937. p. ix plus 390. Pages 134 - 35.)

Table II
Bolt and Nut Assembly Test

Raw Score	Percentile
104 seconds	90
18 "	80
50 "	70
43 "	60
41 "	50
31 "	40
0 "	30
5 "	20
0 "	10

Table III
Mechanical Assembly Test

Raw Score	Percentile
156	90
151	80
148	70
145	60
142	50
136	40
130	30
122	20
106	10

Table IV
Spacial Relations Test

Raw Score	Percentile
seconds	90
"	80
"	70
3 "	60
4 "	50
7 "	40
"	30
"	20
"	10

Table V
Wiggly Block Test

Raw Score	Percentile
107 seconds	90
166 "	80
217 "	70
277 "	60
376 "	50
600 "	40
600 "	30
600 "	20
600 "	10

(over 40 per cent of the boys were unable to complete the Wiggly Block Test in ten minutes.)

Table VI

Interpretation of Scores

Test	Required Score	Shop Suggested
olt and Nut Assembly	118 Sec. or less	Automobile
echanical Assembly	142 or more	Automobile, Machine, Sheet-metal, Wood-working.
acial Relations	102 sec. or less	Machine, Sheet-metal, Tailoring, Wood-working
ggly Block	277 sec. or less	Wood-working.

~~Auxiliary Education Summer School Pamphlets~~ - #2.

Prepared by W. F. Koerber,
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AN EVALUATION OF SOME METHODS AND PROCEDURES IN THE TEACHING OF READING TO NON-ACADEMIC ADOLESCENT BOYS

200 copies.
July 1947.

An Abstract

AN EVALUATION OF SOME METHODS AND PROCEDURES IN THE TEACHING OF READING TO NON-ACADEMIC ADOLESCENT BOYS

Jarvis School for Boys was organized in 1923 by the Toronto Board of Education to meet the educational needs of non-academic adolescent boys. To this school about two hundred boys are transferred annually from the elementary public and separate schools of the city. A three-year course of study is offered. It is designed to meet the particular requirements of those boys who, after seven or eight years in elementary school, have demonstrated their inability to adjust satisfactorily to a wholly academic programme. Most of those admitted are mentally retarded, that is, their mental age is less than their chronological age; a few are educationally retarded, which is to say that, although normal in intelligence, their achievement is definitely inferior to their ability.

The first-year curriculum provides for instruction in reading for an average of seventy minutes a day. Routine observation and frequent testing have revealed that the pattern of achievement in reading was being developed by a combination of contributory factors of which intelligence, or the lack of it, was not necessarily the most influential. Academic studies, as a whole, were begun in an atmosphere of mild disinterestedness. It was always apparent that many were severely retarded in reading and quite passive in their desire to improve.

The search for the specific causes of the frequent inconsistency between reading achievement and mental ability led first to an investigation of the physical causes and thus logically to the annual testing of vision and hearing. It was soon discovered that identification of various types and degrees of defect was of little value unless accompanied by ways and means of providing maximum corrective help for those whose vision and hearing were found to be defective. Funds for this purpose were provided by a service club which also purchased a Metronoscope to assist in the teaching of reading. The novel and intriguing manner in which words and stories could be read from this instrument enlisted almost spontaneous interest on the part of many boys. It was felt that this might serve to overcome some of the passivity and disinterestedness. From the school's viewpoint, corrected vision, improved hearing and the interest-impelling features of the Metronoscope would have value only if they served to stimulate improvement in reading, a subject in which there was evident retardation. The problem of this study, therefore, resolved itself into a threefold one, namely, to investigate and evaluate the effect of corrected vision, improved hearing and the use of the Metronoscope upon the reading achievement of non-academic adolescent boys.

Recognition had to be taken of the probability that factors other than those in the process of being evaluated might singly or in combination affect the development of reading ability. This necessitated a preliminary investigation which had as its first objective a summary and general analysis of the major factors which might combine to determine the attitude of the non-academic adolescent to learning in general and reading in particular. In order that the influence of a single variable such as corrected vision might be measured, dissociated from other interfering factors, the preliminary investigation was extended to include a second objective, namely, a detailed study of a selected number of cases with a view to pairing them in such a way as to equalize, i.e. match, for each pair all the major variables except the one in the process of being measured.

Investigators, for the most part, are unwilling to admit that there is a cause and effect relationship between poor vision and poor reading. They prefer to conclude that poor vision contributes to poor reading. Some state that the relationship is one of interaction, others that it is one of interference. Similarly, no investigator is prepared to say that impaired hearing of a less serious nature is the direct cause of poor achievement in reading; it is recognized, however, that deafness and severe loss of hearing may cause serious retardation. As yet, few have sought to explore the interest-impelling value of the Metronoscope. The machine was originally developed to stimulate improvement in reading by means of better eye movements. It has since been conceded that poor eye movements are symptoms rather than causes of poor reading.

The Subjects of this Experimental Study

One hundred and thirty-six boys were admitted to the school in September, 1944. One hundred and twenty-three were available for the full seven months of the study. This group may be considered to have been a typical cross-section of early teen-age mentally or educationally retarded boys. Sixty per cent of the 123 came from Auxiliary classes, forty per cent from Grade classes. They had spent an average of 7.7 years in the elementary schools where 97.5 per cent of them had repeated one or more grades; forty boys repeated one grade, forty-six repeated two, twenty-nine repeated three, three repeated four and two repeated five. The average chronological age at the time of transfer from the elementary schools was thirteen years and eleven months, the average mental age ten years and two months and the average I.Q. approximately 73; chronological ages ranged from 12/2 to 17/9, mental ages from 6/6 to 14/10 and I.Q.'s from 48 to 103. Sixty-six boys, 53.6 per cent of the experimental group of 123, were retarded more than ten months in reading. Twelve boys were more than thirty months retarded. On the other hand, twenty-five boys were not retarded, that is, they were reading at or above their mental level.

Eighty-three per cent were found to have one or more physical defects; the prevalence of defects ranged from 32 boys with one, to 33 with two, 24 with three, 9 with four, 3 with five and 1 with six.

Diseased tonsils, enlarged glands and malnutrition were most prominent among the defects. Approximately 30 per cent of the homes, a representative and typical cross-section, were inspected and evaluated by means of the rating scale of the Minnesota Home Status Index. The mean sigma rating of -.80 revealed them to be considerably below the accepted standard. The Scale, however, failed to make a pronounced distinction between the more desirable and less desirable types of home environment. Personality traits as revealed in overt behaviour and in the manner of adjustment to the new environment and to class fellows were observed and reported upon by the entire teaching staff. The cumulative opinion was that the aggregate frequency of desirable types of behaviour outnumbered by two hundred the combined frequencies of less desirable and undesirable types. The boys, generally speaking, were described as happy, good-natured, fond of sports and responsive to praise. Juvenile delinquency was almost non-existent; a few cases of truancy served to mar an almost ideal record. A comparative analysis of the routine shop records of three instructors revealed that two-thirds of the entire group were considered to have satisfactory work habits and a positive interest in handwork. The approach to handwork was, by and large, observed to be confident and ambitious, uninhibited by fear of difficulty and failure. This was taken as indicative of the level to which interest in academic work might be restored. Following a detailed review of the history and background of all cases, thirty-eight were selected for intensive study and arranged as nineteen matched pairs. The work entailed in matching the nineteen pairs as accurately as it is possible to match human beings drew attention to conditions prevailing in the lives of these boys. Chief among these were the following:

(1) Reading ranked highest among elementary school difficulties.

(2) Grade I was repeated the most often.

(3) Recommendations of the psychiatrical examination were frequently delayed a year or more and, in a few cases, ignored.

(4) The majority of the parents had an appalling indifference to the recommendations of the medical examiner.

(5) Many of the observed physical defects were of long standing and could have been treated earlier in the boys' lives.

(6) Malnutrition was indicated in an alarming number of cases.

(7) The effects of repeated failure were not climaxed by psychopathic behaviour in the general sense of the term. There was a greater tendency on the part of those in higher I.Q. brackets to combat the effects of frustration by overt and reactionary behaviour; disinterestedness and indifference. Generally speaking, the cumulative effect of repeated discouragement was a strong undercurrent of unwillingness to exert any more effort.

(8) The Auxiliary Class appeared to make an even greater contribution to the social competence of the individual than to the remedial adjustment of his academic backwardness.

(9) For the most part, those in lower I.Q. brackets were referred for examination within the first three years at elementary school; those with higher I.Q.'s (80 and up) were not referred until severely retarded or until compensatory behaviour had set in.

(10) The Minnesota Home Status Index failed to distinguish adequate and inadequate homes in the low income and congested district categories. It rated them all uniformly low.

(11) There was no evidence of juvenile delinquency in the accepted sense of the term.

It was necessary to scrutinize a great many records and reports in order to gain possession of all the available information pertaining to each of the thirty-eight case studies. In general, it was observed that--

(1) Reports of medical and psychiatric examinations were concise and to the point.

(2) Records and reports of Auxiliary Class teachers gave evidence of a growing tendency to view individuals positively and constructively.

(3) Records and reports of Grade teachers, when available, were vague and negative. There were a few which drew attention to a boy's good points with emphasis comparable to that bestowed upon his failures.

(4) The majority of teachers failed to supply all the data essential as a background to remedial teaching, in spite of the fact that report forms had provided space for such information.

(5) The clinical approach to the study of the whole child as a functioning unit has remained relatively unexplored.

The Experiment

All pupils admitted in September, 1944 were screened for defects of vision using the Project-O-Chart, an improved adaptation of the well-known Snellen chart. All whose visual acuity was 20/25 or less in one or both eyes, functioning separately, or together were referred to an ophthalmologist for re-examination and expert diagnosis. Twenty-seven boys, 19.8 per cent of all boys admitted, were thus referred; twenty-three of these were given prescriptions for eye-glasses. It was interesting to find that the ratio of the corrections for far-sightedness and its modifications to nearsightedness and its modifications was as four is to one. The cost of providing and maintaining these glasses was met by the service club.

A similar plan of procedure was followed with respect to the selection of cases with impaired hearing. The screening device used was the Western Electric 4C group audiometer. All who were found to have hearing losses of nine decibels or more in one or both ears were referred to an otologist; fourteen per cent of those admitted in September were given prescriptions outlining corrective or compensatory techniques. The hearing loss of five boys of this group was found to be more or less permanent due to the earlier effects of such diseases as measles and scarlet fever; it was recommended that they be assigned a seat near the teacher during periods of instruction. It was found that four others were relatively hard of hearing because of seriously diseased tonsils and adenoids in need of removal; the parents concerned failed to heed the doctor's advice and nothing was done. An additional

four had hardened wax and adenoid vestiges removed by the otologist within a period of two weeks after their first visit; it was felt that this treatment would restore normal hearing. The remaining five boys were prescribed a diet rich in vitamin B, four capsules a day for twenty-five consecutive school days. The otologist's re-test reports showed that all five had gained in hearing acuity, that the hearing of one had been restored to normal, that one could hear the tuning fork whereas previously he had been unable to hear, and that three boys made gains of from ten to thirty per cent in the acuity of one or both ears.

Thirty-six boys were chosen at random from the eighty or more who had expressed the hope that they might be given an opportunity to do some reading from the Metronoscope. The machine had been demonstrated to all boys as a novel and attractive method of presenting reading material. The group of thirty-six was divided by lot into two groups of eighteen. Each group set out on a twenty-seven week schedule; eighteen were expected to read for a period of time daily, eighteen for a similar period weekly. Each individual's schedule was begun with material at least two grades below his observed achievement level in silent reading; this was done in order to lessen the possibility of frustration. Incentives of three kinds were used, namely, the desirability of reading the material at increasingly greater speeds, praise when merited, and constantly available progress charts by means of which the subject could see that he was competing with his own record rather than with those of his peers.

Differentiated instruction and practice in silent reading were provided in accordance with courses of study prepared to meet the diagnosed needs of individuals and classes. The central purpose of this first-year course was to make reading attractive and desirable; equal importance was given to the prevention of experiences of frustration and failure. The participants in the experiment were, for purposes of instruction, divided into five classes, L1, L2, L3, L4, L5; L1 was the class of highest, L5 the class of lowest average achievement on school admittance tests in arithmetic, silent reading and spelling.

Reading achievement for the seven months' period commencing October 1, 1944, and ending May 1, 1945, was measured by means of alternative test forms of equal difficulty. Classes working at Grades V and VI level were given the Gates Reading Survey. Classes working at Grades III and IV level were given the Advanced Primary series of the Dominion Achievement Tests in Silent Reading. The class working at Grades I and II level was given the Primary Grade I series of the Dominion Achievement Tests in Silent Reading.

Achievement in Reading

The achievement in silent reading after a period of seven months' instruction is shown in tabulated form for each of the classes and groups participating in the experiment. In each case the expected gain in reading age is equal to the calculated aggregate growth in mental age.

THE ACHIEVEMENT IN SILENT READING OF ALL CLASSES

AND GROUPS PARTICIPATING IN THIS STUDY

(October 1, 1944, to May 1, 1945)

Class or Group	N	Average I.Q.	Aggregate Expected Gain in Reading Age (Months)	Aggregate Observed Gain in Reading Age (Months)	Percentage of Boys who Contributed Expected Gains or Better
Class L1.....	17	81.2	92	264	94.1
Class L2.....	20	78.6	106	188	65.0
Class L3.....	29	72.6	144	102	34.5
Class L4.....	33	72.0	161	117	48.5
Class L5.....	24	63.6	104	94	50.0
Vision.....	22	78.2	118	220	72.8
Hearing.....	15	73.4	75	114	73.4
Metronoscope Daily	18	69.8	85	111	61.1
Metronoscope Weekly	18	70.3	87	122	66.7
General Study Experimentals... (Regular Programme plus one or more of Corrected Vision, Improved Hearing and Experience on the Metronoscope)	56	72.4	277	408	64.3
General Study Controls..... (Regular Programme only)	67	73.3	330	357	46.3
All Participants..	123	72.8	607	765	54.5
.....					
Matched Pair Experimentals...	19	73.6	93	223	89.5
Matched Pair Controls	19	74.1	98	57	31.6

The data show that the 123 boys who were available for all the tests of reading achievement made an aggregate gain of 765 months of reading age. They were expected to gain 607 months. This corresponded to a decrease in aggregate retardation from 1388 months to 1230 months. Gains as great or greater than expected were contributed by 67 boys, 54.5 per cent of the total; 56 boys, 45.5 per cent of the total, failed to achieve expected gains. The most pronounced differences between observed gains and expected gains were contributed by the individuals in the two classes of highest mean I.Q. and highest mean elementary school achievement in arithmetic, silent reading and spelling. The class of highest mean I.Q., studded with boys experiencing corrected vision and improved hearing, exceeded its expected aggregate gain of 92 months by 172 months for a total gain of 264 months; the class with next to the highest mean I.Q., also containing many with improved vision and hearing, exceeded its expected aggregate gain of 106 months by 82 months for a total gain of 188 months. The three academic classes with I.Q.'s averaging less than 75 did not do as well; observed gains

were slightly less than expected gains. There was a real difference in the extent to which those with I.Q.'s over 75 took advantage of instruction and remedial techniques.

Re-grouping of the tests' data revealed that the group with corrected vision and achieved 186.4 per cent, that is, observed gains exceeded expected gains by 86.4 per cent; the group with improved hearing achieved 152 per cent; the group reading daily from the Metronoscope achieved 130.6 per cent; and the group reading weekly from the Metronoscope 140.2 per cent. The total achievement of the 56 boys who received additional help was 147.3 per cent; the achievement of the 67 who received reading instruction only was 108.2 per cent. This accelerated achievement on the part of the four subgroups was reflected by a comparable decrease in the aggregate months of retardation. The vision group, whose mean I.Q. was almost five points higher than the next highest of the three subgroups, reduced its retardation by the greatest amount, 102 months; the retardation of the hearing group was reduced by 39 months. The Metronoscope groups, on the whole, made positive gains but reduced their retardation only slightly.

Gains, equal to or exceeding expected gains, were contributed by 72.8 per cent of the boys in the vision group, 73.4 per cent of the boys in the hearing group, 61.6 per cent of the daily Metronoscope group and 66.7 per cent of the weekly group. Of the 67 boys who received reading instruction only, 31, or 46.3 per cent, achieved gains equal to or exceeding expected gains. In general, a greater number of boys in the additional help groups contributed a greater percentage of more than expected gains and a smaller number failed to reach expected gains than in the group which received reading instruction only. It was observed that the eighteen boys who read from the Metronoscope once per week did better than the boys who read daily both as to aggregate achievement and the number of individuals whose observed gain was as great or greater than expected gain.

The application of statistical techniques to the analysis of achievement showed that all five academic classes participating in the study made gains significantly different from zero. This would imply that the reading instruction had a positive and tangible effect upon reading progress. However, a portion of these gains, whether considered individually or collectively, could be attributed to increased capacity for learning due to the expected growth in mental age concomitant to a seven months' growth in chronological age. This led to a statistical study of the magnitude of the differences, by classes, between observed and expected reading age gains. The data derived from these claculations showed that the two classes with highest mean I.Q. rating achieved significantly more than anticipated. These classes contained some normals, a majority of dull normals together with a few severely retarded mentally. The two classes containing no normals, a few dull normals and a majority of mentally retarded individuals made positive gains but failed as classes to show the effect of additional help. In these last-mentioned two classes slightly more than half of those receiving special attention to vision and hearing and additional reading experience using the Metronoscope reciprocated with additional gains. Apparently other interfering factors played an important role

in the pattern of achievement. One of these was the fact that the enrolment of about forty in one class and thirty-five in the other put definite limitations upon the frequency and duration of individual help and guidance. The infrequency of exceptionally large gains emphasized the fact that few of the members of these classes were able to discard completely the passive attitudes toward learning; the cumulative effect of many variable influences, both physical and emotional, persisted strongly enough to lessen the potential influence of improved vision and hearing and the use of the Metronoscope. A review of the results of L5, the so-called non-reading class, composed of boys with very limited ability with an average I.Q. of about 63, shows that there was no significant difference between growth in mental age and achievement in reading in spite of the fact that two-thirds of the enrolment received additional practice on the Metronoscope. The boys almost succeeded in matching mental growth and reading achievement, indicating that the programme of individual attention and corrective procedures was indispensable to progress. The members of this last-mentioned class were, at the beginning of the reading programme, retarded, on the average, almost fifteen month of reading age; four of the boys were retarded thirty months or more. This was due to the fact that in previous years expected growth in mental age was not mathced with comparable growth in reading age. This would have continued had not the remedial programme been instituted to stimulate greater effort and a more satisfactory attitude toward work.

The achievement in silent reading of the individuals comprising the nineteen matched pairs was similarly statistically analyzed. The nineteen individuals, in whose performance the influence of corrected vision, improved hearing and Metronoscope-impelled interest were vital but undetermined factors, gained 223 months in reading age, exceeding expected gains by 139 per cent; the nineteen individuals with whom they were matched gained 57 months in reading age, 42 per cent short of expected gain. The cumulative effect of the variables was such that every individual in the experimental section made positive gains in reading age; seventeen of the nineteen made reading age gains in excess of expected gains. Thirteen of the nineteen matched Controls made positive gains; six of the thirteen gained more than anticipated. A mean difference of 8.73 months of reading age in favour of the Experimentals can be ascribed in part to the corrective and remedial techniques associated with their reading instruction.

Within-pair differences in reading age gains were studied for each of the nineteen matched pairs. The differences within six of the pairs were of such magnitude that the probability of such differences occurring by chance was remote. In three of the pairs the variable most likely to affect the results was corrected vision, in two of the pairs the variable was the use of the Metronoscope, and in one pair it was improved hearing. The data pertaining to the remaining thirteen pairs were analyzed and it was found that the effect of corrected vision was both directly and indirectly observable, that the influence of improved hearing was evident but not quite so prominent, and that the use of the Metronoscope was associated with satisfactory achievement in most cases. One of the most astonishing discoveries was that the only positive and significant relationship between I.Q. and reading progress was that of the nineteen matched-pair Experimentals who had

received the full benefit of the remedial and corrective programme. The coefficient of correlation was .405; all other such correlations in the study as a whole were insignificant and approximately zero.

The introductory and concluding test scores and the mental ages of all 123 subjects of the study were investigated to determine any significant and important inter-relationships. Coefficients of correlation pointed to only one situation in which there was a consistently significant relationship between mental age and a measure of reading ability. Grade scores in vocabulary were closely related to the mental ages of the class with the highest mean I.Q. There was also a slightly significant tie-up between mental age and reading scores in the class with the lowest mean I.Q. Generally speaking, however, grade scores in reading were found to bear little relationship to mental ability. On the other hand, there was a high degree of correlation between the introductory and concluding test scores in all phases of reading except comprehension. Extensive practice in reading a wide range of easy supplementary material had a stimulating effect upon growth in comprehension techniques particularly in the three classes with highest mean I.Q.'s. The pattern of growth was such that there was scarcely any relationship between original and final scores.

Summary of the Findings

In general, the data obtained from this study may be interpreted to give support to the following conclusions:

(1) The correction of defective vision is indispensable to satisfactory progress in reading.

(2) The improvement of hearing bears a vital relationship to reading progress.

(3) The Metronoscope used as an interest impelling device contributes to modest reading progress.

(4) Defective vision and impaired hearing must be given due consideration in the explanation of the development of cases of reading disability. It is more accurate to say that they are contributory, or interacting, or interfering rather than casual factors.

(5) Reading progress more in harmony with mental capacity may apparently be achieved by the correction of deficiencies in vision, the improvement of impaired hearing and the provision of individual attention.

(6) It is possible by means of differentiated instruction and individual guidance to produce exceedingly large reading gains in as short a period of time as seven months.

(7) Mental age and I.Q., in themselves, are insufficient as the bases for the prediction of reading gains.

(8) The disproportionate gains of some of the subjects of this study may be due to an I.Q. artificially low because of interfering factors.

(9) It is possible, by appropriate methods, to overcome retardation of long standing.

(10) Experience in the reading of a wide range of easy material has a pronounced effect on comprehension techniques.

(11) The general ability of low I.Q. groups (50 to 70) is closely associated with ability in word recognition.

(12) Higher I.Q. groups (70 to 100) benefit greatly from practice in reading and interpreting material containing words already part of their vocabulary but not necessarily part of their experience.

(13) The passiveness toward voluntary effort on the part of many of the subjects of this study emphasizes the importance of the earlier prevention of, or compensation for, physical and psychological deterrents to progress.

(14) The diagnoses and recommendations of the public health officials must be put into effect early if maximum value is to be derived from them.

(15) The psychological effect of adequate attention to vision and hearing and to the reading needs of the non-academic adolescent results in improved mental health.

(16) Great variation in the methods and rate of adjustment together with a remarkable outward or surface tolerance of some individuals in the face of aggravated sensory and psychological conditions points to the need for an annual re-evaluation of physical, mental and sociological status.

(17) The contribution of the slow-learner to society depends upon a wholesome attitude toward himself and others; this depends, in turn, upon his being developed into a functioning unit. Medical diagnosis of his needs is inadequate without psychological and pedagogical diagnosis. All agencies interested in the development of his maximum capacity to contribute must co-operate in making available all their findings.

Recommendations for Schools

(1) The municipal Department of Public Health should make available, within the school system, the services of experts in the assessment of visual difficulties. In the meantime, in view of the clear emphasis placed by this study on the importance of vision, it would appear highly important to re-assess the merits of the present method of using only the Snellen chart in screening for visual defects.

(2) The careful selection of cases with impaired hearing should be required of all schools and classes doing specialized work with the slow learning and retarded. Attention to the hearing difficulties discovered by competent screening several times during the pupil's elementary school career would forestall much of the retardation and maladjustment.

(3) A school system as large as that of Toronto should provide the services of a reading clinic. This could function independently or as an integral part of a guidance clinic. Its minimum staff should be a director and an expert in remedial reading. The director should be an individual with teacher training, extensive teaching experience and advanced standing in psychology and pedagogy. He should, above all, be acquainted with the most successful methods of testing, diagnosing and interviewing. There should be made available to him the findings of all agencies interested in the specific child in need of help.

The reading expert would base his remedial instruction upon the resulting cumulative case records. All aggravated reading disability cases could be referred to such a clinic both for instruction and advice, The Metronoscope would be valuable in such a clinic.

(4) Elementary school principals should be required annually to explain accurately and in detail what is being done for all cases of non-promotion. In such explanatory reports, particular attention should be paid to vision and hearing status.

(5) There should be a reliable method of making parents assume the responsibility of maintaining their children in good health with particular attention being paid to their vision and hearing. Poor health, inadequate vision and hearing result in uncertain progress and unfair comparisons. These, in turn, lead to personality maladjustments which jeopardize the child's mental health. This chain of circumstances should not be permitted to start.

(6) Funds should be made available, possibly through the Department of Health, to supply the needs of such who because of parental indifference suffer undeserved neglect. Eyeglasses should be provided for all cases considered in need of them.

(7) Elementary school principals should be required to exert every effort to bring about the promotion, at thirteen years of age, of all non-academic pupils to the specialized environment of senior auxiliary schools (more properly called junior vocational schools). In particular, those with I.Q.'s from 75 to 90 should be spared the experience of repeating grade classes after thirteen years of age. The association of success with honest effort is especially important at this age and with this group; otherwise, it is the seed-bed of many classroom behaviour problems. This study has demonstrated that adjustment can be brought about in a remarkably short period of time.

(8) The value of the I.Q. should be assessed only in the light of all other information.

(9) Intelligence tests, if used, should be given to all pupils and at specified ages. They should be accepted by the pupils as an essential step in diagnostic procedure. There should be no easily apparent association, with respect to the time of their administration, with such circumstances as failure and undesirable or compensatory behaviour.

(10) Pupils attending all schools organized to serve the same purpose as the Jarvis School for Boys, the locale of the present study, should be graded according to achievement level rather than I.Q. or mental age.

(11) Generally speaking, teachers should be encouraged to make a sympathetic study of each child in their care and to take a more positive and constructive attitude toward the slow-learning and maladjusted.

Pamphlets On The Education Of The Physically Handicapped

Prepared by

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PRE-SCHOOL TRAINING

For The

DEAF INFANT

Auxiliary Education Branch
Ontario Department of Education
Toronto, March 1948
300 copies

PRE-SCHOOL TRAINING FOR THE DEAF INFANT

1. Purpose - This pamphlet is prepared for the information of parents of deaf infants who require information on
   (1) how deafness can be checked at an early age;
   (2) what training can be given in the home before the child enters school;
   (3) what agencies provide guidance to parents.

This information is of vital importance to parents of children who are born deaf or who acquire deafness at an early age.

2. Organization of this Pamphlet

3. The Home Training of the Child with Deficient Hearing

During the early years of the deaf child, it is the parents who must be educated to understand that:

(1) their deaf child has special needs because of his handicap;
(2) their deaf child has ultimate possibilities provided that he is given the early educational treatment suited to his individual needs;
(3) it is necessary for their child to learn to adapt himself to conditions as he finds them;
(4) it is necessary to make the members of the home circle understand these conditions;
(5) it is necessary to utilize every possible means to establish communication between the child and his parents and between the child and other children.

Things the Parent Needs To Know

(a) Learning About Deafness

In the first instance, the diagnosis of deafness must be made by a doctor, preferably an otologist or ear doctor. The doctor is aware of the physical limitation and the treatments which are available. He is also the one who should be consulted when advice on mechanical aids is sought.

Your next step should be to secure advice on your child's education. You may write any of the agencies listed under the section "Agencies Providing Guidance to Parents" and be sure of receiving a reply. If you live near the Ontario School For The Deaf (Residential) or any of the day classes you can make arrangements by letter or telephone to interview teachers, who will share their experiences with you, and direct you to printed sources of information.

(b) The Personal Adjustment of Parents

It is a severe emotional shock to find that your child is deaf. Deafness is invisible and we cannot see it, so we may not believe it or may attempt to deny it. The pa rent tends to go from day to day hoping that something will happen to relieve the condition or to go from doctor to doctor seeking a remedy. These activities on the part of the parent may also be a way of postponement of facing the facts.

The parents may react emotionally by overprotecting their deaf child. The general effect is to spoil him. This is bad for a hearing child, but is much worse for a deaf child.

Another reaction is that of rejection of the deaf child. It is shown by getting angry with him or pitying him. This waste of pity is in reality thinking of him as not so valuable as the other children in the family. There is nothing more serious in its effect on children than emotional rejection by their own parents. It leads to feelings of insecurity, social with drawal, stunted personalities, and to all kinds of troubles within the family.

The parents should:
(1) Face the handicap realistically;
(2) Accept it emotionally;
(3) Find out all there is to know about deafness;
(4) Cooperate sympathetically with each other, although most of the training will devolve upon the mother.

(c) General Information

All children who are deaf or severely hard-of-hearing must be given (i) lip reading lessons (ii) speech training and (iii) ear training to make use of whatever remnant of hearing may remain.
This training should be commenced at the time speech would develop in the normal youngster.

It is known that at about the age of nine months the normal child begins to be cognizant of speech sounds, and that three or four months later they begin to use words. It is known that deaf and hard-of-hearing children babble in the same way as children who hear. Therefore, one thing the parent can do is to keep the child babbling because when speech is achieved this practice will have preserved the child's natural voice qualities.

At the age of nine months, the development of sound perception should be begun. This can be done by calling the baby's attention to bells, whistles, drums and the general sounds of daily life. Out of this practice the parent may find the child's hearing range -- where there is awareness of sound, even if there is little awareness of speech sounds.

Beginning at nine months, the parent should talk to the baby within the hearing range of the baby, whether it be one inch, six inches or one foot from the ear. This is auricular or ear training for awareness to speech sounds.

The deaf child should be enrolled in a school for the deaf at the earliest age he may enter.

At the same time, begin training of the eyes to assist or substitute for the ears. The parent should always face the light because light at your back throws shadows on your face and makes lip reading difficult. The small child cannot read lips while looking up from his cot so it is necessary for the parent to bring his or her face to the level of the child's eyes, and at such a distance that he may obtain a comfortable perspective. The distance is important as an infant has difficulty in focussing his eyes on objects which are near him. This exercise should be taken near a mirror to allow the child to see his own attempts at speech.

A baby can become acquainted with amplification such as is possible through the radio or hearing aids. Where deaf and partially deaf children grow up with these, time need not be lost in adjustment to individual hearing aids. It is possible to connect ear-phones to your radio or record player, and to allow the sound to be greatly amplified without increasing the volume too much for those with normal hearing. Children who are deaf or severely hard-of-hearing appear to welcome listening to orchestral or band music, although there is little evidence to show that it does more than tickle the ear. It is probable that such training will help in the tone, pitch and placement of the voice.

. Every device possible should be used to make the child sensitive to vibrations. Hold him and sing to him. Let him put his hand on the piano or on your nose and throat. Let him feel sound through the soles of his feet. Let him touch the radio.

It is very important that the child be treated as a normal member of the household, of all play activities and of the community. If he is to absorb the speech idea, he must be talked to, he must constantly see people talking to him and he must hear as much speech as possible.

Lip reading, speech training and ear training must go hand in hand with sense-training and motor activities. Development of motor proficiency and sense impressions from the sight, smell, taste and touch cannot wait on development of speech and very limited powers of hearing. The parent needs to know what developments are normal at each age level. Some idea of this development can be gained by comparing your child's development with that of others in the neighbourhood. The Vineland Social Maturity Scale lists the activities which are normal at each age level and can be used as a criterion of your child's social and motor proficiency.

4. Beginning Lip Reading

If you talk to your child just as though he can hear and encourage him to watch your lips and mouth, he will get the idea of speech. Further preparation for lip reading is given by having him do little tasks such as a hearing child does. By playing games with him, he will in time respond and lip reading may be begun.

A good way to begin is by telling him the names of things such as his toys, the furniture, his clothes and parts of the body. Before you begin, be sure that the light is on your face and not in the child's eyes. Attract his attention to your mouth and say, "Show me your nose", or "Show me your thumb."

It will be necessary for the mother to illustrate the response desired such as pointing to his nose and lifting up his thumb. The following day repeat the performance and continue this until he responds correctly. In the same way, other name-words can be taught and added to the list, particularly if it is something he can see.

Later, you can begin to try some of the names of members of the family. The parent should be careful here not to use words which confuse the child such as "Mamma" and "Papa" which look exactly the s ame. It would be better to use the terms "Mamma" and "Father", "Mother and Daddy", or "Mother and Papa" in your household to prevent confusion.

5. Methods of Testing the Hearing of Very Young Children

Normally speech begins at about twelve months. From this it may be deduced that a child of two years who does not know a few words may have a defect. This may be due to defective hearing and would indicate the need for a medical examination by an ear doctor.

For little babies of nine months or more it is possible to use their reflex actions such as blinking, turning towards the sound or crying when stimulated by very loud noises to obtain a measure of their hearing. While the baby's attention is distracted by a picture or a trinket by one person (preferably the mother), another person placed behind the baby makes the following noises at varying distances:-

(1) Familiar words whispered - baby, mother, daddy, bottle;
(2) Tinkling a bottle or glass with a spoon;
(3) Familiar words spoken in a normal voice;
(4) Familiar words spoken in a loud voice (not shouted);
(5) Ringing a bell;
(6) Tapping a dishpan or child's drum with a stick.

If the child hears a whisper at twenty feet or more, his hearing is probably normal. If he hears a whisper at four feet his hearing loss is not very great. A card should be held between the speaker and the baby when the sound is made within six feet.

This test should be given several times over a period of one to three months.

When the baby is able to repeat spoken words, test with the faintest whisper at 4 feet and the loudest whisper at 20 feet from the child. It is better to stand behind the child or out of his sight so that the child does not sense any movement to attract his attention. If the words are not heard by the child at these distances as indicated by failure to respond properly, it means a loss of about 20 decibels.

These examinations are useful at an age when it is not possible to give an examination by means of an audiometer. Where the child does not hear speech sounds, he may hear sounds which are not in the speech range.

Another method of testing which may be used with older children who may have suffered a hearing loss as a result of one of the children's diseases is as follows:

Select half a dozen toys or pieces of clothing whose names are known to the child. Get another person to help you with the test. Call the name of each article in turn and have him pick up the one you name and show it to your assistant. The assistant must show interest and pleasure as well as give praise whenever he chooses the right one. Speak clearly and softly and keep getting farther away. If the assistant can easily hear the words you speak, but the child cannot, she is probably hard-of-hearing. Repeat the game over and over again.

6. Preparation For Entrance to Day or Residential Schools

Deaf children may enter the Ontario School For The Deaf at four years of age. This early age of entrance to school is necessary if the best possible results in speech development are to be secured. It has also been found that the child benefits greatly if any residual hearing remains by being given daily practice in the use of group hearing aids.

When the child enters a day or residential school, he should be trained in regular habits of eating, sleeping and elimination. Insofar as it is possible, a child of four should be able to put on his clothes.

The first three habits noted are necessary to sustain life. The child must do them in order to live. His adjustment to school life away from home will be much quicker and happier if good habits of eating, sleeping and elimination are established.

A child should not be asked to do what must be done. It is much better to say "It is time for bed" than to say "How would you like to go to bed now?" It is fair and wise to give warning that a certain thing will happen at a certain time. If a child is engrossed in a game with bed-time or meal-time approaching, warn him by saying "In five minutes, it will be time for -----".

In general, children should be taught to eat whatever is set before them. If the child is a small eater, small helpings should be given. If he is a poor eater, he should not be forced. If it is not touched, omit the dessert which most children like. Competent medical opinion indicates that no harm is done if a child skips a meal occasionally.

Scenes at the table should be avoided, even if it is necessary to give the child his meals early. Scenes disturb the digestion as well as the happiness and security the child feels in his home.

The diet should include such simple food as cereals, vegetables, eggs, a little meat, custards and fruits. Orange juice and milk (at least one quart) should be provided daily. Candy, ice-cream and soft drinks given between meals disturb the digestive routine. Candy comes best at the end of a meal. Your child should be taught not to eat food which has fallen on the floor.

Doctors suggest that (1) children under six years should sleep 12 hours every night (2) children 6 - 10 should sleep 11½ hours every night (3) children up to 16 years should sleep half and hour less each year from 10 - 16. There should be no argument about bedtime, and the schedule should be maintained. It is healthy for him to have the windows open and the lights out.

Regular bowel movements can be taught if the parent observes what seems to be the best time and then trains him to go to the bathroom daily at that period. In school, orange juice and prune juice are part of the diet. Milk of magnesia and mineral oil are given at school only in stubborn cases. If you give your child a laxative at home be sure to inform the teacher when you bring him to sschool.

The child should be taught to blow his nose properly. He should blow one nostril at a time and should not blow hard.

Away from home, he should be independent enough to wash his hands, brush his teeth and put on his clothes.

7. A Hearing-Health Programme For Parents

Contagious diseases like scarlet fever, measles, diptheria, mumps and whooping cough often give ear troubles to the young child. The chances of developing hearing defects can be reduced by inoculations.

Earaches mean that the child is sick. Because a bad earache is very dangerous, medical attention should be secured promptly to prevent the development of possible hearing loss.

A running ear is dangerous to the child's health because it may cause destruction of hearing. The otologist or ear doctor should be called on for help.

Diseased adenoids and tonsils may cause colds and ear troubles. They can cause middle ear abscesses or close the opening between the ear and throat. Mouth breathing often indicates adenoids or other nasal obstructions.

Wax or objects in children's ears may cause a hearing loss. If you cannot remove it with a damp cloth over the end of your finger, only the doctor should remove it. Wax may be packed in the ear so hard that repeated treatments may be required for its removal. Some children must go to doctors occasionally for wax removal.

Some "Don'ts" for good hearing health

(1) Don't use home-made remedies for earache. Get the doctor's advice on what to do.
(2) Don't box or slap the child's ears or let children shout into each others ears. Don't let children poke into their ears or put objects into ears.
(3) Don't let the child blow his nose loudly or with one or both nostrils partly closed. Infectious materials are easily forced into the middle ear.
(4) Don't let a child get water in his ear if he has a punctured ear drum. Don't let the child swim in any but controlled pools.
(5) Don't wash the ear canal with soap as it irritates the canal which in turn may make the child scratch the ear with soiled fingers. Use a damp cloth.
(6) Don't let a child suffering from ear troubles catch cold. Such a child should not wet his hair for combing or go without a hat.
(7) Don't think that a child is stubborn when he habitually doesn't answer.
(8) Don't think that a child will outgrow his hearing loss.
(9) Don't delay having the ears tested if you suspect a hearing loss.
(10) Don't forget that most defects of hearing are preventable.

8. Agencies Providing Guidance To Parents

The following associations and schools exist for the study and training of deaf.

(1) The Ontario School For The Deaf, Belleville, Ontario.
Superintendent - W. J. Morrison, B.A., B.Paed.
This is a residential school which admits residents of Onta rio without fees at four years of age and up. Teachers of the deaf are trained at this school under the direction of Miss Catherine Ford.

(2) The Auxiliary Education Branch, Department of Education, Parliament Buildings, Toronto.

Inspector of Auxiliary Classes - C. E. Stothers, B.A., D.Paed.
Assistant Inspector of Auxiliary Classes - L. H. DeLaporte, B.A., B.Paed.

Teachers of Speech Correction and Lip Reading are trained at the Auxiliary Education Summer Courses. The Day Classes provided by the local school boards are inspected by officials of the Auxiliary Education Branch. Surveys of speech and hearing may be made. Enquiries may be referred to this office on any physical or academic handicap.

(3) The National Society For The Deaf and The Hard-of-Hearing, 3 Bloor St. E.Toro
Managing Director - E. B. Lally, B.A.

This society exists for the purpose of helping people who are deaf and hard-of-hearing. A free service for testing hearing is provided by the society's clinic. Vocational rehabilitation and job-placement services are maintained for adults.

(4) Day Schools For The Deaf and Hard-of-Hearing

Day classes have been organized by school boards after a survey has been made to ascertain the number of pupils. Parents of deaf or hard-of-hearing children may make arrangements with officials of the school boards concerned to confer with the teachers of these schools to discuss the education of their children.

1. Hamilton - Gibson Street School (2 classes for deaf)
2. London - Lord Roberts School (class for deaf)
3. Ottawa - Cambridge Street School (2 classes for deaf and hard-of-hearing)
4. Toronto - Clinton Street School (4 classes for deaf)
   Kent School (Class for hard-of-hearing)
   Kimberely School (" " ")
   Ogden School (" " ")
   Rosedale School (" " ")
5. York Township - Rawlinson School (1 class for deaf and hard-of-hearing)
6. East York Township - Secord School (1 class for deaf and hard-of-hearing)
7. Windsor - Victoria School (1 class for deaf and hard-of-hearing).

(5) Teachers of Speech Correction and Lip Reading

Help and advice may also be secured from the teachers of Speech Correction and Lip Reading employed by the local Boards of Education. The names of these teachers may be secured from the inspector of schools or the secretary of the school boards in Fort William, Hamilton, Kitchener, London, Ottawa, St. Catharines, Toronto, York Township and the Township of East York.

(6) Ontario Association of the Deaf
Secretary: Mr. R. E. McBrien, 485 McDonnell St., Peterborough.

This association publishes a monthly magazine dealing with the activities of the deaf. It is concerned actively with the problems of adults who are deaf and adolescents who have graduated from school.

(7) The Volta Bureau - 1537 Thirty-fifth St. N.W., Washington 7, D.C.

This bureau publishes a monthly magazine on the activities and education of the deaf, as well as textbooks and reprints of articles in the magazine. Advises correspondents on the location of schools and teachers of the deaf.

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Pamphlets On The Education Of The Academically Handicapped No. 6

Prepared by C.E. Stothers, Inspector of Auxiliary Classes.

METHODS AND MATERIALS FOR TEACHING LIMITED LEARNERS

Auxiliary Education Branch
Department of Education
Toronto, June 1949
300 copies.

1. Purpose - Simple individual teaching methods and materials are suggested in this pamphlet for the use of parents and teachers who have the problem of the home training of "Limited Learners". The term "limited learners" is used to describe all children who are unready for school at the usual age of five years and who in all probability will not progress to the academic level of the average grade three pupil.

These pupils can learn a great many things which will make life much better for themselves, their parents and their neighbours. Their training must be individual since they are not ready for instruction in large class groups. Training of limited learners should be attempted to promote their social development and because their backwardness may be due to some handicap which may be overcome.

II. Organization Of This Pamphlet

1. Purpose
2. Organization
3. The Background of Knowledge About Limited Learners
4. General Method of Instruction
5. The Parent's and The Teacher's Attitude to Limited Learners
6. Sense Training Methods and Materials
7. Practical Training
8. Rhythm and Language
9. List of Private Schools for Backward Children.

III. The Background of Knowledge About Limited Learners

A child who is likely to be successful at school has matured to a point where formal training in large groups can be undertaken in a building which is not his home. His training in school is dependent on his previous development and his current experience. When he is enrolled in the Kindergarten he can do most, if not all, the following things:

(1) copy and match simple forms;
(2) fold paper;
(3) count more than three or four visible objects;
(4) name many common articles and repeat short sentences;
(5) play and associate with other children;
(6) follow directions with accuracy;
(7) name primary colours;
(8) comprehend situations which are described to him in words;
(9) make his needs known;
(10) remember happenings of the previous day or hour;
(11) dress himslef and care for his toilet needs;
(12) reply to questions within his experience.

The child who cannot do most of these things will not progress satisfactorily in school. He will not react well to group teaching and will probably find a great barrier between him and the meaning or interpretation of the symbols on which reading, spelling, arithmetic and writing depend. Such a child usually shows that he is

immature by behaviour which is marked by tantrums or refusal to respond or to accept the rules and habits which teachers and pupils consider a necessary part of a normal environment.

Sometimes parents withdraw their child from school for a year or more to allow him to develop to the point where he can profit by group teaching. In some cases, the parents have found out early in the child's life from their doctor that their child has a mental or physical handicap which will prevent him attending school. It is for such children that this pamphlet has been prepared.

The parents of limited learners have usually sought expert medical advice to find out what may be done to alleviate the child's condition. They have compared his physical growth and his physiological development with that of children of the same age. They have found that his slow development in speech, physical movements or stature can be associated with brain injury, glandular deficiency or malnutrition. Where the child has a crippling condition, defective hearing or defective sight, the parents have usually sought and found the most expert advice. This search for advice which is common to almost every case of extreme backwardness in children provides the teacher with essential information. The parents can refer the teacher to the medical doctors who have examined the child and the following facts can be learned:
(1) whether or not there is a physical defect of sight or hearing;
(2) whether or not there is brain or nerve injury or epilepsy;
(3) whether or not the condition comes from glandular deficiencies; and
(4) the degree of physical or mental maturation.

With these data in hand, the teacher can review the methods materials, experience and success of outstanding teachers of limited learners to find guidance for this particular case. Mlle Descouedres of Geneva, Switzerland found it advisable to secure information on the mental ages of limited learners before attempting their education. She found that limited learners need specific training of the senses of sight, touch and hearing. Other great teachers have shown the values of music, stories and practical tasks in teaching children at pre-school levels. In the Ontario Hospital School, it was found that sense-training of sight, taste, touch, smell and hearing were very necessary as a preliminary to practical training and language.

For these reasons, this educational course for limited learners has been organized to provide directions for parents and teachers under the headings,
(1) Sense Training,
(2) Practical Training,
(3) Rhythm and Language Training.

IV. General Method of Instruction

The normal pre-school child has learned to talk by imitat-

ing his parent's speech. Dressing, playing and feeding habits have been learned by the same method. Manners and social habits, also, are learned by imitation. The pattern may have been impressed and the imitation re-enforced by the parents and the family and the neighbours or by conditions.

Since the limited learner is a pre-school child in many, if not all, abilities, imitation appears to be the logical method. If enough pattern levels can be found, they would form the additional necessary psychological component. Teaching experiences assembled from many sources show that the following rules are effective:

(1) Begin instruction at the child's level;
(2) Encourage successes even if, to you, they may appear to be insignificant; the fact of success is more important than the amount of success;
(3) Do the same type of thing at about the same time each day;
(4) Do not keep a child at one task for a long period;
(5) Encourage deep breathing;
(6) Teach each specific action through imitation.

The information supplied by the following tools is helpful:

(a) Mental Measurements

The local school inspector can arrange to administer a mental test. Psychiatric examinations can be arranged by the Medical Officer of Health who may secure these services from a Mental Health Clinic.

These measurements supply basic information for the teacher.

(b) Social Maturity Scale

A copy of this scale may be obtained from the Inspector of Auxiliary Classes, Department of Education, Toronto. This scale lists many of the common actions which are performed by children at each age level. It is useful to the parent because the child's social development can be checked over a period of one year. The Social Maturity Scale thus becomes an important measure of the child's progress.

(c) The Oseretsky Scale of Motor Proficiency

Motor proficiency is shown by the child's speed and ability to handle things or to perform significant muscular tasks. While this scale has not been standardized in Canada or the United States, it is useful as a measure of motor abilities. A copy of the record form may be obtained from the Inspector of Auxiliary classes.

V. The Parent's and the Teacher's Attitude to Limited Learners

The limited learner usually exhibits some of the following tendencies or symptoms:

1. an inability to remember;
2. a wandering attention;
3. an imbalance in his behaviour;
4. command of a small stock of words;
5. an awkwardness in handling things.

These disabilities must be remembered by the parent or teacher who is attempting to teach a handicapped child. They are the reason that the following rules should be observed in instruction.

1. Avoid antagonizing or arguing with the child. Say "Do this" instead of "Don't do that". Be constructive in your directions rather than negative.
2. Treat each lesson as a game to avoid forcing the child. Suggest a new game instead of insisting on an old one.
3. Have your materials ready or immediately available. Do not start teaching without more lesson material on hand than you think you will need.
4. If the child fails, never scold him. Scolding, threatening, scorn and reproof will not help the child to do better. Encouragement may help.
5. Many repetitions are needed for teaching limited learners. They need approximately ten times the amount of repetition required by a normal child. Do not assume that the limited learner is bored when you are or that he has learned a task when a much younger child in the family has mastered it.
6. Proceed slowly. Learning will likely be very gradual. The parent must guard against impatience or any tendency to force the pace of learning.
7. The child must succeed at something every day. The tasks must be simple enough to provide more successes than failures. This is another reason for providing a variety of activities.

VI. Sense Training Methods and Materials

This approach to learning is through patiently training the senses of sight, smell, hearing, touch and taste. The principal method is imitation. The child may need discrimination training to enable him to distinguish similar forms and similar sounds.

Methods

1. Sight Training

The child should learn to recognize common objects. These common objects should be assembled in one place to provide for drill each day. In the first lessons, real objects should be used. Later the pupil may be given toys or pictures. If the child cannot use words himself, he may be able to point out the object or picture or demonstrate an action. It will be easier for the parent if the child speaks some or all of the names of things. It must not be assumed that he does not know the object because he does not name it.

Words which cannot be pictured should be demonstrated. The children later repeat the deomonstration to show that he knows its meaning.

The words can be chosen from the Grade I words listed in "A Canadian Word List" published by The Ryerson Press, 299 Queen St. West, Toronto.

Ordinarily, the teacher will start with two or three objects or toys which will be named by pointing them out. The child will then be asked to point to and name each object. The objects will then be re-arranged and named. When the child names the small group without error, another object should be added.

2. The Sense of Touch

A set of three or four common objects similar to those mentioned under the Sense of Sight should be kept or put in a brightly coloured bag with a drawstring. The child after feeling the article without seeing it is asked to name it. If he doesn't recognize it, he should be allowed to take it out, look at it, handle it, and then name it.

3. The Sense of Hearing

Obtain as many different whistles, horns, and noisemakers as you can. From behind a screen, choose one of them to produce a noise or a musical sound. The child is expected to recognize the sound.

A variation of this is to strike an object with a stick and to ask the child to recognize the source. Glass bottles, kitchen ware, dishes or a breadboard may be used. The usual household sounds can be put to use in training the sense of hearing.

4. The Sense of Taste

The child must be taught to taste things and not to swallow them. The materials may be kept in a set of small corked bottles.. A glass or plastic rod may be used to place a small amount on the child's tongue. The child then repeats the name the mother or teacher gives to the substance. This training should begin with not more than three substances such as salt, sugar and vinegar. One additional substance may be added as soon as the others are known.

5. The Sense of Smell

A set of small corked bottles is used for training the sense of smell. The uncorked bottle is placed under the child's nose and he is shown how to sniff in. The name of the substance is repeated several times and the child is encouraged to imitate it.

Some children have to be taught to sniff in and may persist in breathing out.

6. Colour Perception and Discrimination

Small pieces of red, yellow, blue and green cloth have been found effective in teaching colour. Pieces of coloured paper, pegs, and sticks or marbles or blocks can be used for variety, and to maintain interest.

(a) Matching - Small pieces of brightly coloured cloth are given to the child to be matched with larger pieces of the same colours. The teacher points to the larger piece and asks the child to find a small piece the same colour.

(b) Naming - The teacher picks up a small piece of cloth and asks the

child to name the colour.

(c) Selecting - The child selects the colour named by the teacher.

(d) Discrimination - Orange and yellow may be confused by the child. These should be mounted side by side on a piece of cardboard. The ability to discriminate them may be taught by asking the child to point to the one named by the teacher. Where the child has difficulty in discriminating between other colours, the same method can be used.

(e) Use of the Peg Board - An assortment of brightly coloured pegs may be secured for the peg board. The child can be trained to make rows of red or blue or yellow pegs.

7. Form Discrimination

The necessary shapes may be made from cardboard. In the 10¢ store, one may find a packet of forms cut out in felt. The celluloid or plastic circles used in Tiddliewinks can also be used. A large number of squares, circles, etc. should be mixed together and the following tasks presented:

(1) Matching

(2) Selecting.

8. Sound Discrimination

Ask the child to imitate sounds made by the teacher. Start with the sounds made by common animals and birds. Follow this with words as soon as possible. Try to train the child to discriminate between singular and plural forms of words by training him to depend on the sound only. By holding a card over your lips you make the child depend on sound alone. If he cannot discriminate them by hearing alone, try to train him to watch the teacher's lips and his own speech patterns in a mirror. Limited Learners do not readily learn to lip read.

Materials For Sense Training:

1. A Basic List of Words - Two lists of words are given. List I contains words for which pictures may be secured or made. List II contains words which should be demonstrated as they cannot be pictured adequately. The purpose is to develop speech and language long before reading is attempted. If the child cannot say the words he may point to the object or picture. The words are given in a planned order in both lists. After the child has a stock of words, he may begin to give definitions in terms of use such as "Milk is to drink" or "Bed is for sleeping", etc.

List I - Picturable Words

Mum, dad, ear, hand, nose, eye, mouth, teeth, finger, toes, shoe, spoon, bottle, cup, hair, shirt, stocking, towel, mother, arm, tooth, brush, coat, button, father, doll, ball, hat, cookie, milk, comb, foot, chair, table, dog, cat, boy, girl, soap, neck, bed, bear, egg, door, balloon, kitten, bell, cone, one, two, three, a lot of, orange, cow, pig, horse, pot, car, box, apple, red, blue, green, glass, duck, wagon, bath, boat, house, drum, clock, spool, train, penny, stick,

back, chin, banana, fork, knife, key, nail, hammer, candy, pail, basket, store, paper, four, five, room, umbrella, ground, black, white, can, block, brick, rubber, robin, fire, sun, bird, aunt, uncle, horn, frog, nest, cake, bread, butter, cross, circle, square, yellow, broom, kettle, face, chicken, sand, gate, letter, tree, leaf, lamp, nail, pencil, potato, carrot, wall, meat, six, seven, sky, flower, star, stone, rake, stove, teapot, oven, tent, mat, hall, kitchen, moon, pumpkin, paint, bag, brown, mud, jar, crayon, iron, saucer, marble, hook, bean.

List II - Words to be Demonstrated or Acted

Up, down, kick, roll, drink, eat, talk, look, see, don't, wash, come, give, stop, open, hot, ride, quack, find, want, bark, bang, pocket, drop, hold, shut, fast, game, fix, keep, hit, big, little, on, off, fast, soft, round, go, wet, dry, run, jump, hop, cold, sit, watch, bring, bite, kiss, laugh, cry, lace, taste, smell, listen, feel, touch, not, lift, fall, pile, draw, fill, put, walk, slow, sweep, dust, dig, smooth, buzz, rap, long, short, fill, I, me, she, it, they, we, her, his, their, pray, rough, tall, right, left, night, day, wind, rain, wink, swim, find, race, hard, pay.

2. Touch Training

Some of the objects listed under "Picturable Words" should be used for Touch Training.

3. Training of Hearing

(I) clapping hands
dinner bell
whistling
door knocker

(II) motor horn
whistle
dropping penny in bank
turning key in lock

(III) brushing shoes
brushing coat
running tap water
blowing nose

(IV) tapping floor
dropping marble
hammering nail
dropping ball

(V) bouncing ball
singing
beating drum
piano

(VI) barking of dog
clucking hen
lowing of cow
purr of cat

(VII) ticking of clock
train whistle
mewing of cat
crying or sobbing

(VIII) rolling marble
dropping key
cough
sweeping broom

(IX) percolator
watch tick
drawing chair across floor
door bell.

4. Taste Training

(i) salt
sugar
cocoa

(ii) milk
cod liver oil
vanilla

(iii) cinnamon
alum
molasses

(iv) orange juice
vinegar
strawberry juice

(v) apple juice	(vi) carrot	(vii) bread	(viii) molasses
baking soda	potato	cake	honey
celery salt	cabbage	cheese	syrup

Note - In Sections (vi) and (viii) small pieces of the raw vegetable or the baked products may be placed on the tongue and the child should be allowed to chew them.

5. Training the Sense of Smell

(i) peppermint	(ii) vinegar	(iii) cocoa	(iv) celery
ginger	wintergreen	cod liver oil	salt
camphor	molasses	apple juice	orange juice
			vanilla
(v) oil of cloves	(vi) ginger ale		
nutmeg	Eau de Cologne		
rubbing alcohol	laundry soap		

6. Colour Perception and Discrimination

(i) Matching - red, green, yellow and blue.
Naming - red, green, yellow and blue.
Selecting - red, green, yellow and blue.

(ii) Matching, naming and selecting - red, green, orange, yellow, pink, purple and blue.
Discriminating between (a) orange and yellow
(b) purple and blue
Using the peg board to apply knowledge of these colours.

(iii) Matching, Naming and Selecting - black, white, red, orange, yellow, green, blue, brown, purple and grey.
Discriminating between (a) light and dark shades
brown and purple
brown and grey.

7. Form Discrimination

(i) Matching, Selecting (a) circle, cross, square, half-circle, triangle.
(b) rectangle, oval.
(c) star, hexagonal and diamond.

(ii) Matching and Selecting (a) cubes, spheres, pyramids, cylinders, and plinths
(b) $\frac{1}{2}$ cubes, spheres, pyramids, cylinders, plinths

(iii) Matching and Selecting - Common articles jumbled in a large basket.

(iv) Matching and Selecting - (a) Flat forms drawn on cardboard.
(b) Flat forms where each pair is a different colour.
(c) Outline pictures of things.
(d) Outline pictures when each picture in the pair is coloured differently
(e) Outline pictures on three cards.
(f) Card Pairs on which are mounted pictures of two, three, four, etc. animals, toys, etc.
(g) Printed cards and common objects which have been used previously in Sight Training.
(h) Using stand-up cut-outs from Woolworths or Kresge's instead of real things, match the printed work with its stand-up picture.

(v) Using crayon or large Kindergarten pencil or chalk, have the child draw the following.
(a) Vertical lines - starting at the top.
(b) Horizontal lines
(c) Ball (a circle)
(d) Cross (a telephone pole)
(e) Square (a mat or rug)
(f) Triangle (ice cream cone)
(g) Triangle (a tent)
(h) Combinations of these forms such as a house, a wagon, etc.

(vi) When the child has completed these exercises, manuscript writing may be attempted.

II. Practical Training

Method - This term is used to mean those activities which involve muscle co-ordination. While the list is graduated in difficulty, the teacher must be prepared to introduce them in irregular order to suit the individual needs of each child.

The teaching method is imitation. The teacher shows the pupil how it is done. The pupil then attempts to copy what has been shown. In all cases, the pupil uses materials which he can see and handle. The teacher must be prepared to demonstrate the operation over and over again. When one step has been learned, it should be practised many times.

The operations which have been learned can be used to keep the child profitably employed. It is necessary that a routine be established by which the child is given similar tasks at a regular

time each day. The teacher decides on a sequence for a morning or a day's work which if written out would look something like the list of jobs below:

(1) Tracing - 5 minutes
(2) Cutting - 5 minutes
(3) Winding - 2 minutes
(4) Stringing - 5 minutes
(5) Colouring - 5 minutes
(6) Sorting - 5 minutes, etc.

Evidence of progress will be shown when the pupil's tolerance for a job has increased from 2 minutes to 3 minutes or from 5 minutes to 6 or more minutes.

Materials

The following list gives the teacher some guide in choosing materials for practical training and the jobs which may be evolved.

1. Winding - (a) Train the child to wind coarse cord on a bobbin (a very large spool). One end of the cord should be fastened to the bobbin. The cord should be five feet long.
(b) Continue the training with a #10 spool and 6 feet of fine cord.
(c) Continue the training using coarse thread.

2. Sorting - (a) Have a 6 quart basket filled with at least two of each of the following: clothespins, small bottles, spoons, sealer rings, cans, etc. Train the child to sort them in pairs.
(b) In another basket keep a supply of horse chestnuts, screw nails, pebbles, shells, etc. Select one and have the child pick out all the others like it.
(c) Sort out according to lengths, pieces of string, wood, wire, bolts, etc.

3. Colouring - (a) Trace simple outlines on wrapping paper using a small rectangular or square cardboard box top and a tomato can as forms. Let the pupil fill these spaces with brightly coloured chalk or crayon. Keep his first attempts and date them so you will have some measure of his improvement. The child's job is to keep within the outline.
(b) Use smaller-sized forms.
(c) Buy a colouring book at the store.

4. Cutting - (a) Have the child cut out the forms in 3 (a)
(b) Cut out the forms used in 3 (b)
(c) Cut out the forms in the colouring book or catalogue.

5. Tracing - (a) Train the child to trace his own forms using the materials in 3 (b).
(b) Use the materials in 3 (c) for tracing.
(c) Buy animal cut-outs at Woolworth's and have him trace irregular forms which can be used for colouring.

6. Piling Blocks - (a) In vertical column.
(b) To represent a chair
(c) To represent stairs.

7. Outlining - (a) Have the child outline drawings similar to those described in 3 (a) with lentils, squash or melon seeds.
(b) Outline drawings such as 3 (a), 3(b) and 4 (c) in plasticene which has been rolled between the palms.

8. Stringing - (a) String large wooden kindergarten beads on a long cotton lace.
(b) String straws, macaroni pieces, acorns, rose-hips, peas, etc. on a string using a blunt (tapestry) needle.
(c) String small beads.

9. Sweeping - (a) The concrete walk
(b) The verandah or back porch
(c) The kitchen

10. Dusting - (a) The top of a table
(b) A chair
(c) The furniture.

11. Spool Knitting - (a) Make a large spool-knitter as follows:- Obtain a large bobbin. Drive 4 small nails in at one end at equal distances apart around the hole. Finishing nails are satisfactory because the head is small. If finishing nails are not available, cut the heads off ordinary nails. The nails should be driven in to leave 3/8" or ½" exposed. For beginners use candlewick.
(b) Use a small spool to make the knitter and knit with fingering wool.

12. Sewing - (a) Covering small picture frame with yarn in button-hole stitch.
(b) Covering small cardboard frames with yarn in button-hole stitch.
(c) Sewing large buttons on bright canvas which has

been stretched on a frame.

(d) Sewing cards. These may be made of cardboard on which outlines have been drawn. The holes are punched about 1 inch apart at first. The forms used in 3 (a), 3 (b) and 4 (c) may be used in that order. Brightly coloured yarn and a large needle should be used.

13. Threading Shoe Laces - (a) Four pieces of wood can be fashioned roughly into the form of a shoe. Holes should be bored to represent eyelets. With a leather lace, the child can practice threading the lace through the eyelets in the approved ways.
(b) Proceed with threading a lace in one of the father's shoes.
(c) Attempt lacing his own shoe.

14. Buttoning Frame - (a) One piece of cloth with a large buttonhole and another piece on which has been sewn a large button are mounted on a frame. Practice is done first with the frame in the horizontal position and later in the vertical position. Later the practice is given with the frame held against the body.
(b) Two buttons of a smaller size.
(c) Three buttons of different sizes.

15. Hook and Eye Frame - Similar to Buttoning Frame.

16. Throwing - (a) Make 6 bean bags 4" square and fill limply with beans or corn. Practise tossing them from teacher to pupil and back again.
(b) Make a target with a hole 10" across. Practice tossing into this target.
(c) Make or buy a target with several holes and with different values for each. Introduce this game. Let him beat you.

17. Hammering - (a) Purchase Hammer and Peg Board at a toy store or Hendry's School Supply House at $2.50
(b) Hammer short nails with large heads into a board, or plank or block (one or two daily).
(c) Hammer nails of various sizes.

18. Modelling - (a) Buy one pound of plasticene at a toy store. Use it for modelling forms which are understood and have meaning to the child.
(b) Keep a supply of clay in a covered crock. If a plasticene model turns out well, it may be done

again in clay. This model should be allowed to dry. It can be used to stimulate the child to attempt better work.

19. Tricycle - Train the child to ride a tricycle. This provides necessary exercise as well as developing skill in pedalling and steering.

20. Finger Painting - Finger paint may be made according to the following recipe.
½ cup Linits Starch
1 1/3 cup boiling water
½ cup soap flakes
1 tsp. glycerine.
This paste material is kept in a tightly covered jar.

When finger painting is on the day's programme, a quantity can be placed in one or more of the holes in a 6-hole cookie pan. Small amounts of dry tempera are added to the paste to make the desired colour or colours.

The child and the teacher should each have an apron. A flat sheet of newspaper is spread out on the table. The child takes some of the coloured paste in his hand and smears it over the paper. The stages in finger painting are somewhat as follows:
(a) Patterns on newsprint
(b) Patterns on wrapping paper or white newsprint
(c) Illustrations on wrapping paper or white newsprint.

21. Assembling Toys - (a) A nest of boxes to build towers
(b) Puzzles made by mounting pictures on cardboard and cutting into irregular pieces.
(c) Twelve-piece Jig Saw Puzzles.
(d) Pull toys which can be linked together.
(e) Cart with removable wheels and pegs through blocks of different sizes.
(f) Nursery School Toys - See Pamphlet from St. George's School For Child Study, St. George St., Toronto.

22. Walking - (a) Walking a straight line.
(b) Walking a curved line.
(c) Walking a line holding a cup of water in one hand.
(d) Holding a wooden wand about 3 ft. long horizontally across the back of the neck with one end in each hand. Walk a line either straight or curved.
(e) Walking a line backwards.

23. Braiding - (a) Obtain 3 pieces of gingham about 3 inches wide and 3 feet long. Fasten to a ring in the wall at the height of the pupil's waist. Train the child to braid these.
(b) Use three pieces of cotton clothesline.
(c) Use cord.

24. Balancing - (a) Have the child stand with his heels together, hands on hips. Give the commands "Heels Raise", "Knees Bend", "Knees Stretch", "Heels Lower". Repeat the exercise 4 times.
(b) Train the child to hop on one foot.
(c) Train the child to hop along a line.

25. Jumping - Give the child practice in jumping. This may start with the Nursery Rhyme;

Jack be nimble, Jack be quick,
Jack, jump over the candlestick.

The first attempts should be over very low objects placed on a rug. The height should be about 3 inches This height should be increased to match the skill as it develops.

26. Bouncing a Ball - (a) Allow the child to bounce the ball once and catch it.
(b) Allow the child to increase the number of bounces.
(c) Teacher bounces ball to child who bounces it back.

27. Hoeing - An outdoor exercise for the summer. Allow the child a corner of the garden in which to practise.

28. Sand Box - (a) Prepare 2 sand boxes approximately 6 ft. long, 3 feet wide and 8 inches deep, side by side, and fill one with sand. Have the child shovel sand from the full box to the empty one.
(b) Provide sand pail and shovel for free play, such as building castles, etc.

29. Raking - This is a seasonal outdoor exercise.

30. Sawing Wood - A bucksaw and saw horse are needed. The first attempts should be small poles. As the pupil's skill develops larger logs may be used.

31. Polishing Furniture and Floors - This is an outcome of the exercises in Dusting.

32. Setting the Table

33. Making a Bed

34. Plain Knitting - Use steel needles with wool or string to make squares for afghans or wash cloths.

35. Washing and Drying Dishes

36. Sorting Linen

37. Ironing - (a) Flat pieces with a cold iron.
(b) Flat pieces with a hot iron.

38. Peeling Potatoes

39. Making Porridge

40. Making Soup

41. Serving Food

42. Sanding Wood - (a) Buy a sand block at the hardware store. Practise sanding a piece of wood.
(b) Sand verandah or steps before annual painting.

43. Coping Saw Work - Buy a coping saw and a dozen blades at the hardware store. Order a copy of "Coping Saw Carpentry" from Moyer's School Supply House. Secure a coping saw jack and clamp it to a bench or table. Follow directions for holding the saw as given in "Coping Saw Carpentry" Use patterns which have no difficult lines for the first attempt. "Coping Saw Cut-outs" is another book which is published by W. J. Gage and company.

44. Painting - With enamel and a brush obtained from the local hardware, paint the article made under the directions given for #43.

45. Sawing - With a cross-cut or rip saw or both, give practice in sawing to a line.

VIII. <u>Rhythm and Language</u>

Because both rhythm and language can be approached through Nursery Rhymes and Music, these activities are described under one heading. The child is expected to imitate the teacher and thus to acquire speech patterns and rhythmic responses. If this step is taken successfully, it may be developed into those more varied patterns of speech which mark the child who is ready for school.

The teacher or mother may remember a great many nursery rhymes from her own childhood. These can be repeated for the child's benefit and thus learned by rote.

(a) Nursery Rhymes and Stories - If the teacher has no stock of nursery rhymes and tales, she can secure source material from (1) The Metropolitan Mother Goose - Metropolitan Life Insurance Co., Ottawa (free). (2) Nursery Rhymes (Everyman Edition), J. M. Dent and Sons, 224 Bloor St. W., Toronto.

Another way of introducing Nursery Rhymes and Stories is to use records and recordings which can be used at times when the mother is busy, or during the periods between lessons. A selected list of records which are progressive in difficulty is given below:

1. Mother Goose Rhymes - Decca #K1
2. Nursery Rhymes - Decca #K2
3. Nursery Rhymes - Bluebird #B.C.1
4. Fairy Tales - Decca #K3
5. Album - Columbia #J20
   The Gingerbread Boy
   The Wee Wee Woman
   Three Billy Goats Gruff
6. Winnie The Pooh and Christopher Robin - Decca #K12
7. More Winnie The Pooh and Christopher Robin - Decca #K15
8. Snow White and the Seven Dwarfs - Victor #J8
9. Hansel and Gretel - Victor
10. The Little Engine That Could - Bluebird #B.C.6
11. Little Black Sambo and His Jungle Band - Bluebird #B.C.6
12. Robin Hood - Victor #P35
13. Songs of the Zoo - Bluebird #B.C.44
14. Jungle Book - Victor #D.M. 905
15. Adventures of Marco Polo - Victor #P90

(b) Stories From Books and Pictures

Brightly coloured books from Woolworth's, Kresge's, etc. can be used by the child in the following steps:

(1) Naming pictured objects.

(2) Telling one thing which has been learned about a pictured object. The child could say when pointing to a house "The house has a door", or "The house has a chimney", etc.

(3) Using a series of pictures to tell the several successive incidents in a story. The cartoon "Henry" which appears in the comic section of some Canadian papers is similar. At this stage, it would be more useful and stimulating to the child if it were coloured.

(4) The previous exercises lead up to telling about the child and its personal experiences on trips to the store, trips on the street car, and play experiences with other children.

(c) Rhythmic Exercises

Unless the teacher is an accomplished pianist, she will find phonograph records very useful to guide the child's development in walking, marching, stepping, running, jumping and skipping. The records listed below are chosen from those listed in The Programme of Studies For Grades I to VI of the Public and Separate Schools, 1941 on pages 147 and 148. If the mother becomes tired of hearing a record, other records can be chosen from the teacher's copy of the Programme of Studies.

1. Walking - Marching - Stepping
   1. London Bridge, Mulberry Bush, etc. - Victor #20806
   2. Coronation March - Victor #20150
   3. Rhythms For Children - Victor #20162
   4. Rhythm Medleys No. 1 and No. 2 - Victor #20526
   5. The Poppy, Turn Around Me, etc. - Victor #21620

2. Running
   1. Gavotte (Pepper), Legend of Bells - Victor #20164
   2. The Poppy, Turnaround Me, etc. - Victor #21620
   3. Elfin Dance (Griege) - Victor #20079

3. Skipping and Jumping
   1. Light Cavalry Overture - Victor #20079
   2. Rhythms For Children, No. 3 and No. 4 - Victor #20162
   3. Rhythm Medley No. 1 - Victor #20526
   4. Farandole, Hornpipe and Nigarepolska - Victor #21620

4. Swaying and Rocking
   1. Turn Around Me and Hansel and Gretel - Victor #21620
   2. Rhythms For Children - Victor #20162
   3. Kinder Polka and Carousel - Victor #20432

5. Imitative Motion
   Rhythms For Children - Victor #20162
   Looby Loo and London Bridge - Victor #20806

6. Singing Games
   How D'ye Do My Partner - Victor #21685
   London Bridge, Mulberry Bush - Victor #20806

7. Rhythms and Dances (Clarke Irwin) is a manual of physical exercises set to music. An album of 10 records is necessary for the full use of this manual.

Note
(1) Some records are listed several times.
(2) Teaching directions are available for the singing games.

LIST OF PRIVATE SCHOOLS FOR BACKWARD CHILDREN

1. Cedar Crest Home, Box 54, Atherley, Ontario.
   (Operated by two graduate nurses.)

2. Aurora-on-the-Hill, Aurora, Ontario.
   (Operated by the Sisters of St. John The Divine).

3. St. Hilary's School, Oakville.

4. Abbotsford School, Galt.

5. The Ansley School, R.R. #1, River Road, Niagara-on-the-Lake.

6. Glen Garda School, Windsor.
   (Operated by The Ursuline Sisters).

Prepared for the guidance of Opportunity Class Teachers of the Toronto Public Schools by

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REPORT OF A COMMITTEE ON OPPORTUNITY CLASSES IN THE TORONTO PUBLIC SCHOOLS

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Auxiliary Education Branch
Department of Education
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Opportunity Class Objectives

1. To provide an environment for growth so broad that the exceptional child may have an opportunity to discover and develop his abilities to the greatest degree.
2. To develop (a) a feeling of security necessary for a healthy emotional balance;
   (b) good work habits;
   (c) self-confidence;
   (d) social adjustment;
   (e) independence.
3. To develop an understanding between home and school so that the parent may better understand the child's potentialities, and the school may evaluate unfavourable home conditions that may have a bearing in the development of the whole child.

Admission

At what age?
(a) 6 years plus if the child has spent 1 year in Grade 1.
(b) 10 years plus if the school has a Senior Opportunity Class.

Method of selection
The child should be put in the class as soon as retardation is evident, and certainly before he or she is allowed to form poor work habits.
The pupil should have a psychiatric or psychological examination before admission.
The I.Q. range should be from 50 to 90.
Transfer should be mandatory if recommended by the principal and psychiatrist.
The number of pupils should be limited to 18. If a school has a Junior and Senior Opportunity Class, the Junior class should be limited to 16.

Recommended Equipment

1. Tests
   1 set of Diagnostic Achievement Tests (other special Diagnostic Tests on requisition)
   2 sets of Oral Reading Tests
   6 copies Books III, IV and V - Gates Peardon - "Practice Exercises in Reading"

2. Books for Remedial Reading
   (a) Curriculum Foundation Series (Gage) or Betts Basic Readers.
   4 copies of pre-primer; 5 copies each of Grade 1 & Primer.
   6 copies each of Grade 2 and 3; 4 each of Grades 4 and 5.
   (b) Accompanying Workbooks to the above.
   (c) Today's Work Play readers (MacMillan) in above quantities.
   (d) Accompanying Workbooks.
   (e) Reading For Interest Series (Copp Clarke).
   (f) Accompanying Workbooks.
   (g) Reading Development Series (Copp Clarke)
   (h) Accompanying Workbooks.

Recommended Equipment (cont'd)

3. Books for Written English
1 set of English Workbooks

4. Books for Spelling
1 set of Pupils' Own Vocabulary Spelling Workbooks (MacMillan)

5. Books for Social Studies
5 copies of Book 1 - "Helpers All"
5 copies of Book 2 - "In the City, On The Farm and Along The Road"
5 copies of Book 3 - "In Other Lands"
5 copies of Book 4 - "Then and Now"

6. Books for Arithmetic
1 set of books such as "Rhythmic Arithmetic Workbooks"

7. Books for Science
Basic Science Education Series - As many titles as possible.

8. Books for Health
1 copy of "You" (Gage)
1 copy of "You and Others" (Gage)

9. Dictionaries
4 copies of The Golden Dictionary - Musson.
8 copies - Thorndike's Beginners Dictionary (Gage)
8 copies - Thorndike's Junior Dictionary (Gage)
or Winston's Dictionary for Schools (Winston)

10. Books for Crafts
1. "Boats, Aeroplanes and Kites"
2. "Integrated Handwork in Elementary Schools" (Gage)
3. "You Can Make It" by Newkirk (Gage)
4. "Paper Toys for Classroom Projects" - School Aids Publishing.
5. "Arts and Crafts in Canadian Schools" - Shore - Dent.

11. Supplementary Reading
25 graded supplement ary readers (through Grade 5) large type and illustrated.

12. Professional
1. "The Teaching of Reading" - Mckee - Nelson.
2. "The Child From Five to Ten" - Gesell - Musson.
3. "Remedial Techniques in Basic School Subjects" - Fernald.
4. "Foundation of Reading Instruction" - Betts.
5. "Improving Your Reading" - Wilkinson and Brown.

Craft Equipment for Opportunity Classes

2 Manual Training benches equipped each with
- 1 steel rule
- 1 set square
- 1 marking gauge
- 1 9" plane
- 1 ½" chisel
- 1 Bench saw

For The Tool Cupboard

- 4 hammers
- 1 rip saw
- 2 ¼" gauges
- 1 brace and bit
- 6 wood files
- 2 pr. pliers
- 4 sloyd knives
- 2 small screw drivers
- 2 file cleaners
- 2 awls
- 1 pr. Snips
- 1 cross cut saw
- 1 sharpening stone
- 6 coping saws
- 1 hand drill
- 1 set drill (9) 1/8" up to 1"
- 1 slip stone
- 2 nail sets
- 2 large screw drivers
- 2 steel squares
- 1 paper cutter
- 1 rubber headed mallet

Other Useful Equipment

- Art material in abundance
- Radio and record player
- Long mirror
- Eyelet punch
- Clock
- Individual scissors (1 per pupil)
- Typewriter
- Pinking scissors
- Stapler

Course of Study

This course of study for Opportunity Classes is offered as a possible guide for the teacher who has newly entered the field of special education; but, since the pupils of these classes vary in their abilities and experiences, the teacher should feel free to devise or change so as to be able to meet the needs of her pupils.

Time Allotment

15% Crafts	30% English	20% Arithmetic
10% Spelling	15% Social Studies & Science	5% Health and P.T.
5% Music		

Arithmetic

Stress the fundamental operations in:

1. Adding, subtracting, multiplying and dividing.
2. Telling of time
3. Making of change - value of coins.
4. Measurements - inch, foot, yard, mile; pint, quart, gallon; ounce, pound, ton; dozen, half-dozen; second, minute, hour, day, week and year.
5. Simple fractions:- ½ of, ¼ of, 1/3 of, ¾ of etc.
6. Roman numerals to 100.
7. Practical mental Arithmetic applicable to their experiences.

Arithmetic (cont'd)

The use is suggested of the course as outlined by Dr. Amoss in his "Rhythmic Arithmetic in the Primary School" to the end of Grade 2 or until number consciousness is established. This will be followed by the regular course.

Social Studies

1. How to live in the home and the neighbourhood.
2. The King's Family ------ Our Flag.
3. Homes (a) Canadian - city and farm; past and present
   (b) In other lands.
4. The world as a whole -
   (a) relationship of continents and oceans.
   (b) peoples.
   (c) relative temperatures.
   (d) travel.
5. Land forms.
6. Pictorial maps; maps of school district and the city.
7. Current events.
8. Citizenship - see course by Dr. C,C. Goldring.
9. Visual Education.
10. Visits to points of local interest such as Library; Zoo; Parliament Buildings.

Natural Science

Learning how to live in harmony with Nature.

1. Weather and Seasons.
   (a) keeping of charts.
   (b) noting how sun, wind and rain help us.
2. Habits of Pets.
   Farm animals; Wild animals; Fish and reptiles.
3. Identification of local birds and their habits.
4. Insects.
5. Local trees and shrubs.
6. Flowers - wild and garden.
7. Aquarium and terrarium.
8. Planting of bulbs and seeds.
9. The making of maple syrup.
10. Visual Education.

Physical Education

1. Games for recreation.
2. Listening to music and doing what it suggests.
3. Fundamental steps - marching, skipping, hop, step and jump.
4. Ball handling with or without music.
5. Games and relays with balls.
6. Balance bench work.
7. Dances.
8. Participation in House league games and School games.

Health

1. Health stories.
2. Keeping of the Rules of Health.
3. Daily health check and entry of findings on chart.
4. Prevention of illness.

5. Good grooming.
6. Safety.
7. Pupil-problem discussions.
8. Junior Red Cross.

Writing

1. Manuscript Writing in Grades 1,2 and 3.
2. Cursive Writing in Grades 3,4,5 and 6.
   Note - The change from print to writing should be according to the pupil's age not grade.
3. Stress care in all written work.
4. Change to pen and ink when the teacher feels advisable.

Music

1. Appreciation of good music, radio, records, etc.
2. Rhythm bands.
3. Rote singing.
4. Simple note songs when possible.
5. Singing with instrumental accompaniment.

Arts and Crafts

The aim is to build up confidence, and to develop the pupil through the happy habit of success, to motivate effort, to train manual dexterity, to teach the need for planning, and to economize in the use of materials. The emphasis is not to be on excellence of the final product.

The pupil's projects will depend on his respective interests and abilities, available supplies and equipments.

1. Weaving - card, shute, inkle loom, box loom, table loom, weave-it loom and waffle loom.
2. Modelling - plasticine, salt and flour, clay, paper pulp, asbestos, Plaster of Paris.
3. Picture-making - paint or crayon, paper sculpture, design, finger painting.
4. Wool work - daisy knitters, rake knitters, needles.
5. Nature Crafts - bouquets, animals, tree decorations, centre pieces, necklaces.
6. Leather crafts
7. Wood work
8. Care of equipment
9. Cork work
10. Keene Cement
11. Puppets
12. Sculpture
13. Paper construction
14. Cardboard
15. Carving - soap, wax, wood, vegetable.
16. Corrugated cardboard
17. Rag dolls
18. Felt work
19. Braiding - wool, felt, oil-cloth
20. Raffia
21. Textile painting
22. Batik work - crayons on cloth
23. Punch work - rugs, cushions
24. Pipe cleaners
25. Whittling - abstract
26. Marbelling
27. Jewellery craft - shell work
28. Nail punching - on wood, etc.
29. Scenery - stage settings
30. Scrap fun - old bottles, light bulbs, any scrap material.
31. Oil cloth - book covers, animals, etc.
32. Sewing - baseball caps, ties, beanies, etc.
33. Stick printing

English

Reading - Correction and development of individual reading abilities by:

(a) Testing -
1. to establish basal, instructional, frustration and capacity levels of each pupil.
2. to diagnose disabilities by noting defects such as visual, hearing, speech, dominance, eye movements, etc.
3. to have each child progress at his or her own individual rate.

(b) having an adequate supply of material for pleasure reading.

Silent Reading - a purposeful reading programme including

(a) the silent preparation of oral reading lesson;
(b) the use of workbooks accompanying readers;
(c) the use of silent reading tests;
(d) the use of film slides;
(e) the reading of directions for manual work, both on paper and on the blackboard.

Oral Reading techniques should include all of the following methods and materials:-

(a) Individual oral reading to the teacher, daily, preceded by silent preparation.
(b) 1. Care should be taken to improve speech, voice tone, enunciation, pronunciation, expression and phrasing.
2. Questions should always be used to test comprehension.
(c) Memorization or choral reading.
(d) Blackboard stories.
(e) Bible selections.
(f) Words of songs.
(g) Film strips.
(h) Frequent use of speech correction practice exercises.

Dictionary-Practice should involve at least:-

1. Arranging words in alphabetical order.
2. Use of dictionary by pupils in Grades 3,4,5 and 6.

Expression

1. Speech correction
2. Choral reading
3. Dramatization
4. Oral composition - experiences
5. Discussion of current events
6. Citizenship activities

English in everyday life

Written -
1. Teaching of mechanics of good English.
2. Letter writing.
3. Story writing.
4. Corrective exercises based on the pupil's mistakes.

English in everyday life (cont'd)

Oral and informal activities

1. Telephone conversation
2. Dramatization
3. Visits to library
4. Memory work
5. Telling personal experiences
6. Careful answering questions
7. Corrective exercises based on pupil's mistakes.

Speech Correction - Daily lessons should be given when it is necessary

(a) to stress word endings;
(b) to eliminate baby talk.

Spelling

Since pupils are grouped according to individual grade levels in spelling, the regular text may be used. The kinaesthetic method could be used so frequently that the pupil comes to believe that it is his method for learning to spell. The "Pupils' Own Vocabulary Workbook" can be used effectively for the pupil having difficulty in reading and spelling. A typewriter may also be used effectively with pupils having difficulty in spelling.

Promotion of Pupils

1. The non-academic type pupil
   (a) At age 12, pupil should be promoted to a Handicraft School;
   (b) If at age 12, the pupil does not take the promotion as in section (a), they should remain in the opportunity class until they are 13, and then be moved to the regular grade suited to their present grade level.
   (c) No pupil who is 13 and has an I.Q. of 60 or less should be returned to the regular grade class.

2. The academic type pupil
   (a) Pupils who have been placed in the opportunity class for remedial work should be promoted to the grade at the end of June. At this time, they should have covered at least 3 months work in the grade to which they will be promoted.
   (b) D.P.'s should be promoted at the end of June to the grade if it is felt that they would profit by the work in the regular grade.
   (c) A pupil with an I.Q. of 75 or over and an academic standing of Grade 5 or over, if not promoted to a handicraft school, should be promoted to an academic vocational class in a public school.

GENERAL RECOMMENDATIONS

1. When a pupil leaves an opportunity class to attend a handicraft school or Church Street School, it should be considered a promotion and a certificate should be given the pupil stating that he has satisfactorily completed the work necessary for admission to the handicraft schools.

GENERAL RECOMMENDATIONS (cont'd)

2. Promotions to a handicraft school should be made compulsory and should not require the sanction of the parents.

3. A copy of the pupil's reports in the handicraft schools for his or her first year should be sent back to his original schools the same as is now done by the secondary schools with their first year pupils.

4. Opportunity c lass pupils should be permitted to take some instruction with a regular grade class if they are up to that grade level in at least one subject.

5. Every opportunity class should be equipped with a sink and running hot and cold water.

6. Promotions to opportunity classes should be made at fixed times, and not at a multitude of times.

7. Opportunity classes should not be used for behaviour problems.

8. There should be a new report card for opportunity classes.

9. The opportunity class in any school should not be labelled as such on the door card. It should have the grades listed only.

10. Tests and testing material, and workbooks listed in this report should be available to opportunity classes on grade appropriation, and not on the appropriation for supplementary reading.

11. Opportunity classes should have outlet plugs for use of radio and visual education material, also dark curtains and screen.

12. Opportunity classes should have a combination radio and record-player with suitable recordings for music appreciation and Physical Education.

13. In-service instruction should be provided for instruction of teachers in the use of tests and testing material, and in the use of equipment.

14. The Basic Reader set used in the opportunity class should not be used in the other grades in the same school. This set should be new to the pupil when he is moved to the opportunity class.

15. On admission to opportunity class, a pupil should be given a complete physical examination. The findings of this examination should be entered on the pupils' A.D.P. cards.

Pamphlets on the Education of the Physically Handicapped

Prepared by Miss Nellie V. MacDonald, B.Sc., Senior Teacher of the
Nursery School For The Deaf, King Edward School, Toronto.

BOOKS SUITABLE FOR NURSERY SCHOOL, KINDERGARTEN AND PRIMARY CHILDREN WITH IMPAIRED HEARING

Auxiliary Education
Summer Courses
1950
250 copies.

Books Suitable for Nursery School, Kindergarten and Primary Children with Impaired Hearing

Listed Under:

1. Objects and Early Vocabulary
2. Objects and Vocabulary - Outline Pictures
3. Animals
4. Vocabulary. Sense Training. Reading Readiness
5. Experiences
6. Stories
7. Auditory Training
8. Play Ideas for Parents

Compiled By:

Nellie V. MacDonald,
Pre-school Classes for Children with Impaired Hearing,
King Edward School,
Toronto, Ontario.

November 12, 1949.

Objects and Early Vocabulary

Linen

My Toys.....Sam Gabriel, New York.

Baby Knows..... "

Objects..... "

Who Lives at My House.....Wilcox & Follett, Chicago.

For Babies to See.....James and Jonathan, Kenosha, Wis.

Cloth

Look Here.....Dean's Rag Book Co., London, England

Hard Covers

A. B. C. (Steine's).....Franklin Watts, 285 Madison, N.Y.C.

The Toy Hunt).....Pied Piper Books, New York.

A. B. C.)..... "

First Picture Book.....Hampton Pub. Co., New York.

My Very First Book.....The Children's Press, London, England and Glasgow.

The Golden Dictionary (Golden Books)...Simon and Schuster, New York.

Toys (Little Golden Books).....Simon and Schuster, New York.

(What Am I? (Little Golden Books) "
(Alphabet From A to Z " "
(Little Golden Book of Words " "
(My First Book " "
(My Little Golden Dictionary " "
(Mr . Noah and His Family " "

(First Things (Photographs).....Platt and Munk, New York.
(A. B. C. " "

My First Dictionary (Offedahl & Jacobs)..Grosset and Dunlop, New York.

(A Child's First Picture Dictionary.....Wonder Books, 457 Madison Ave., New York, or Random House, New York.
(A. B. C. and Counting Book

(Here Am I.....Rand McNally, New York.
(See My Toys..... "

Objects and Early Vocabulary

Hard Covers

An A. B. C. Play Book.....L. B. Fisher Pub. Co., New York.

(A is for Apple (Bonnie Books).....John Martin's House. Kenosha, Wis.

(A to Z (Elsie Darien).....John Martin's House, Kenosha, Wis.

A. B. C. (Tell a Tale Books).....Whitman, Racine, Wis.

My First Picture Dictionary (Girder)...Wilcox & Follett, Chicago.

Paper Covers

The Picture Dictionary.....The Children's Press, Chicago.

(Tiny Tots Object Book.....Whitman Pub. Co., Racine, Wis.

(The A. B. C. Book..... "
(Tiny Tots Simple Objects..... "
(Toys (Fuzzy Wuzzy Book)..... "

A. B. C.....Merrill Co., Chicago.

Easy Steps Picture Book.....Abbott Pub. Co., Kenosha, Wis.

Colour Photo Books 6.....Arnolds, Leeds, England.

A. B. C. Word Book.....Sealford Pub. Co., Akron, Ohio.

Outline Pictures for the Busy Teacher

Paper Covers

Picture Dictionary.....Platt and Munk, New York.

My House..... "

My Pets and Toys..... "

The Country..... "

The City..... "

Animals

Linen

Animals ..... Scalford, New York.

Poody ..... Wilcox & Follett, Chicago.

At the Zoo ..... "

Hard Covers

Baby Animals) ..... Rand McNally, New York.
See the Bear) ..... "

Heavy Board Covers

Around the Barn Panorama ..... Schilling Co., New York.

Just Like You ..... William Scott, New York.

Paper Covers

At the Zoo ..... Merrill Co., Chicago.

Farm Friends ..... Whitman Pub. Co., Racine, Wis.

Baby Animals ..... "

Baby Bears ..... "

Little Lambs ..... "

The Lazy Lion, a Fuzzy Wuzzy Book ..... "

Fuzzy Wuzzy Pets ..... "

Fuzzy Wuzzy Farm Animals..... "

Fuzzy Wuzzy Bear ..... "

Fuzzy Wuzzy Kitten ..... "

Paddy, the Fuzzy Wuzzy Duckling ..... "

Scooter, The Fuzzy Wuzzy Puppy ..... "

- -

(Let's See the Animals on the Farm ..... Sam Lowe, Kenosha, Wis.
(Here We Go ..... "

The Bright Eye Book ..... Reuben H. Lilja Co.,
Chicago, Ill.

Vocabulary. Sense Training. Reading Readiness

Games to Play)
Fun with Tom & Betty) ..... Ginn Co., New York & Toronto, Canada

Here We Go ..... Row Peterson, Evanston, Ill.

Before We Read ..... Scott Forsman, Chicago.
Gage, Toronto, Canada.

All Aboard ..... Macmillan, New York and Toronto.

First Days in School ..... Winston

Learning to Read (Trager) ..... Book Society, Toronto.

What Goes with What? ..... Lothrop Lee and Shepherd
419 4th Ave.
New York 16, N. Y. C.

Experiences

Hard Covers

Johnny & the Monarch.....Children's Press or Book Society, Chicago.

Tall Enough Tommy..... "

Children Little Count to Ten..... "

Norman - the Nursery School.....Platt & Munk or Book Society Toronto

Betty's - Bobby's Vacation..... "

The Milk that Jack Drank.....William Scott or Book Society

The Bread that Betsy Ate..... "

The Little Cowboy..... "

The Little Farmer..... "

The Little Fireman..... "

An Engine's Story.....Book Society, Toronto

Grandfather's Farm..... "

Jip and the Fireman..... "

Story About Tall Buildings..... "

Spring Is Here.....Oxford Press, Toronto

Now It's Fall..... "

Davy's Day..... "

Surprise for Davy..... "

Cowboy Small..... "

The Train Book.....McClelland & Stewart, Toronto

Numbers We See.....Scott Forsman or Gage, Toronto

Stories

Hard Covers

The Contented Little Pussy.....Platt & Munk, or Book Society

Kopy Kitten.....Rand McNally or Thomas Allan, Toronto

Supplementary list of books for nursery primary and Kindergarten children with impaired hearing.

Nellie MacDonald
Pre-school Classes
King Edward School.

EXPERIENCES

Hard Covers

The Golden Egg Book (Golden Books)	Simon and Schuster, New York.
Busy Timmy (Little Golden Books)	"
Come Play House ..."	"
Fix It Please ....."	"
Guess Who Lives Here "	"
Miss Muffet, Miss Muffet)	John Martin's House, Kenosha,
Bobby Had a Nickel)	Wis.
The Little Fire Engine (Lois Lenski)	Oxford Press, Toronto, Can.
The Little Farm "	"
The Little Auto "	"
The Little Train "	"
Let's Play House "	"
The Chicken Book	Bonnie Books, Kenosha, Wis.
The Bath Book	Howell Soskin, New York.
Mother's Helpers	Garden City Pub. Co., Garden City, N. Y.
A Book for Baby	Macmillan, N. York & Toronto
Babies	"
Everybody Eats	William Scott, N.Y. or
Here Comes Daddy	" Saunders, Toronto
Everybody Has a House	"
Just Like You	"
The Way the Animals Walk	"
The Milk that Jack Drank	"
Timid Timothy	"
Saturday Flight	"
Saturday Walk	"
Saturday Ride	"
Riding Places	"
Help the Farmer	Morrow, New York
Can You	Frederick Fell, New York
Hello Judy	Scribner, New York
Happy Hours	Sam Gabriel, New York
(Bounding Bear	Rand McNally, New York
(One, Two, Cock-a-Doodle-Do	"
Stop - Look - Listen	Hampton Pub. Co., New York
Where's Patsy (Poppleton)	Clarke, Irwin, Toronto, Can.
Look and Learn	Scott Forsman, Chicago, or Gage, Toronto, Canada.
Doll House (Rainbow Play Book)	World Pub. Co., Cleveland.
Norman and the Nursery School	Platt and Munk, New York.

Hard Covers (Cont'd)

The Wonderful Train Ride	Rand McNally, New York
My Truck Book	"
A Day on the Farm	"
The Button Nose Book)	Capital Pub. Co., 139-5th Ave.,
The Big Clock Book)	New York, or
	McClelland & Stewart, Toronto
The Big Book of Real Trains	Grosset and Dunlop

Linen

Fun All Day	Sam Gabriel, New York
Playmates	"

Paper Covers

(The Big Circus Book	Saalford, Akron, Ohio
(The First Zoo Book	"
(Kitty Does Too	"
Round the Clock	B. B. Ltd., England.
(Out of Doors	Evans Bros., England.
(Off to Town	"
Playtime	Sam Lowe, Kenosha, Wis.
The Bow Tie Book	Reuben Lilya Co., Chicago.
Birthday Party	Dizzy Don Enterprise, Toronto Can.
(Store Friends	Sam Gabriel, New York.
(Travel Friends	"
(City Friends	"
(Good Times with Colour	"
(Good Times with 1.2.3.	"
(Fall is Here	Row Peterson
(Winter is Here	or
(Spring is Here	Copp Clark, Toronto.
(Summer is Here	

STORIES

Board Covers

The Poky Little Puppy The Lively Little Rabbit The Shy Little Kitten Our Puppy	Little Golden Books	Simon & Schuster, New York.
The Woolly Lamb (Hoke & Fox)		Julian Messner, New York.
(The Plump Pig		Rand McNally, New York.
(Poppy, the Lonely Puppy		"
Little Black Sambo Peter Rabbit The Little Red Hen The Town Mouse & Country Mouse The Three Little Kittens The Three Bears Puss in Boots		One Volume - Saalford Pub. Co., Akron, Ohio
Scat, Scat		Platt & Munk, New York.
The Little Boy Who Ran Away		John Martin's House, Kenosha, Wis.
The Gingerbread Boy		Garden City Pub. Co., Garden City, New York.
Seven Diving Ducks		Musson Book Co., Toronto Canada.

Paper Covers

(Peter Rabbit	Whitman Pub. Co., Racine, Wis.
(The Three Little Pigs	"
(The Five Little Pussy Cats	"
(Baby Kittens	"
(Chickaree (Fuzzy Wuzzy Book)	"
(Ruth Newton's Mother Goose	"
(Animal Mother Goose	"
(The Three Little Kittens	Saalford Pub. Co., N. York
(Bobby Bear	"
The Gingerbread Boy	Merrill Pub. Co., Chicago.
Kittens and Puppies	Sam Lowe, Kenosha, Wis.
The Runaway Pigs	Sam Lowe of Canada, Toronto

AUDITORY TRAINING

Paper Covers

A. B. C. Sound Book.....Whitman, Racine, New York.

Sing a Rhyme Picture Book..... "

Counting Rhymes..... "

Nursery Rhymes..... "

One, Two, Button My Shoe.....Abbott Pub. Co., Kenosha, Wis.

Hard Covers

Noises (Little Golden Book).....Simon & Schuster, New York.

Pat-A-Cake (Little Golden Book)..... "

Mother Goose.....Rand McNally, New York

Linen

Animals (Animal Noises).....Soalford, New York

Note:

Any of the books listed under other headings may be used after adequate preliminary training. The Hearing Lip reading method may be employed.

PLAY IDEAS FOR PARENTS

Hard Covers

1. A Treasury of Play Ideas for Tiny Tots)
2. A Little Girl's Treasury of Things to Do) Hart Pub. Co., New York.
3. A Little Boy's Treasury of Things to Do)

4. Fun with Your Child.....Garden City Pub. Co., Garden City, New York.

VALUABLE INEXPENSIVE BOOKS FOR THE PARENTS OF PRE SCHOOL CHILDREN

1. Your Child from One to Six (Pub. 30) Federal Security Agency,
Social Security Administration,
Children's Bureau,
Washington, D.C.

Free or in quantity 20 cents each.

2. (a) Enjoy Your Child, Ages 1, 2 and 3
(b) How to Discipline Your Child.

20 cents each

Public Affairs Committee,
22 East 38th St.,
New York 16, N. Y. C.

3. Child Psychology for Parents: Extension Dept.,
University of British Columbia,
Vancouver, B.C.

50 cents each

4. The Care of Your Child: Schick & Rosensen,
Dell Book No. 340,
251 Fifth Ave,
New York

(Most book stores) 25 cents

5. The Pocket Book of Baby and Child Care.
Benjamin Spock, M.D.
Pocket Books of Canada Montreal or Pocket Books New York
(Most book stores) 35 cents

Prepared for Speech Clinic
Childrens' Memorial Hospital
Montreal.

Pamphlets on the Education of the Physically Handicapped -
Prepared by C. E. Stothers, Inspector of Auxiliary Classes
and R. G. Kendall, Public School Inspector, Auxiliary
Education Branch.

HEARING TESTS

A MANUAL FOR THE OPERATION OF VARIOUS TYPES OF AUDIOMETERS.

Prepared for
Auxiliary Education
Summer Course
1950
400 copies

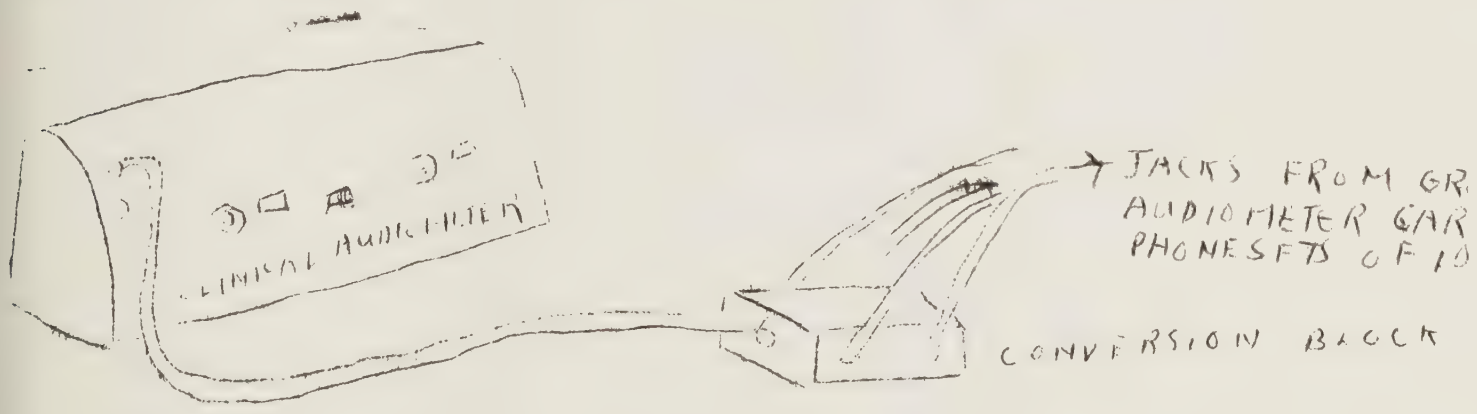
MASSACHUSETTES HEARING TEST

The clinical Audiometer may be used as a device to screen groups of children in a hearing survey by means of specially adapted headphones and a conversion block. The testing can be done with 20 or 30 headphones and it is claimed that this method has certain advantages over the phonograph type of screen test. A few of these are:

1. Pure tones and not speech are used for testing.
2. If extraneous noise occurs during the test, the test operator may pause until complete silence is restored.
3. The marking is faster than with the AC type of test.

The "Massachusettes Hearing Test" refers to a screening technique in which a clinical audiometer is connected up by means of a conversion block to groups of 10 receivers - (usually 20, 30, or 40) and a standardized form of scoring and signal presentation is used. The calibration used in this test also differs from what is used in the clinical sweep test.

Fig. I illustrates one arrangement possible with the equipment used in this test.



As desired, 1, 2, 3, or 4 trays of receivers are hooked into the conversion block B. This in turn is hooked into the clinical audiometer in the same way that the headphone for giving an individual test is hooked.

In the Massachusettes Hearing Test the signals are matched to the decibel levels at the frequencies shown below 1. These are somewhat higher than those employed in individual testing to compensate for the inevitable increase of noise in a group testing situation.

Frequency	Decibel Setting
512	30-35
1024	30-35
4096	35
8192	40
11584	40-45

These settings vary from 5 to 10 decibels according to the acoustic properties and local conditions in each school.

This matching may be done with an artificial ear, or by testing 5 young adult subjects whose hearing is considered normal. Each of the 5 listens to the standard signal on the individual headphone and the faintest threshold of hearing for each frequency is marked on the audiogram. The plugs are then changed and each of the five is asked to note the vanishing point of each frequency. The scores on group and individual tests are then compared and an average struck for each of the frequencies used in testing.

MASSACHUSETTES HEARING TEST INSTRUCTIONS

Please write your name, grade, school and date on the paper on your desk.

"Now, pick up your telephone. In this type of telephone you will see that there are some little holes in one side of the receiver. Put these little holes over your right ear and then put the wire over your head to hold the phones in place. (Demonstrate) Girls must be careful to push their hair back so that it is not under the telephone.

"In the sheet on your desk you will see the word 'Example' printed in the centre of the page at the top. You will also see the numbers one to six and notice a "yes" or "no" after each number.

When we start the listening game, I shall say a number; e.g. one! Then after the number you may hear a sound. Here are some of the sounds you may hear,:" Practice on 512 frequency with the hearing loss scale set to 35 deb. Ask the pupils to raise their hand if they hear the sound. Check the headphones on all pupils who apparently do not hear the sound.

Now; turn the frequency dial to 4096 and practise with the hearing loss scale again set at 35 deb. Proceed as before and ask children to raise their hands if they do not hear this sound.

Finally, turn the frequency dial to 11,584 and again ask children to indicate that they hear this very high tone.

"Now boys and girls, this is the way we continue the game. You must listen very carefully. After I say a number, you must quickly decide if you hear a sound or not. If you do hear the sound, draw a line under the word <u>yes</u>; if you do <u>not</u> hear it, draw a line under the word <u>no</u>!

Now, let's try the example at the top of your page. Ready."

Turn to Master Sheet A.

THE WAY TO SCORE

Say to the class:

"Pay no attention to the example or any of the 'Yesses' Look at column one quickly add up all the underlined 'Noes' and put the total at the bottom of this column. Do the same with column two."

TO EXAMINER:

A total of 2 errors is allowable in each column, e.g. if correct total for column 1 is 5 'Noes' then a total of , 4, 5, 6, or 7 is acceptable. Papers with more than 2 errors per column are handed back to the individual pupil who is then given an individual sweep test on the clinical audiometer while the other pupils return to class.

12 POINTS TO REMEMBER

1. Extraneous noise must be kept to a minimum.

2. Use a different Master Sheet for each successive group.

3. Make certain each pupil has his ear phone properly on the correct ear.

4. Be sure children have enough practice to become familiar with each sound.

5. Build up confidence in the practice periods asking the eager children what they marked and saying encouragingly, "That's Right! or, "You must listen more carefully, next time!"

6. Make sure signal intervals are long enough especially at 512 dcb.

7. Boys often have more difficulty than girls hearing at the high frequency of 11,584. As a result this frequency is usually changed to 8,192 in testing groups of boys.

8. Some authorities confine the testing to three frequencies in the speech range; viz; 256 (low) 1024 or 2048 (middle) and 4096 (high). Their purpose in doing this is due primarily to the importance of good hearing in the educational process. A survey for educational purposes is largely concerned with how well a child hears speech in his regular class lessons and not with the establishment of the exact degree of loss on each frequency as a medical diagnosis would require.

9. Children handicapped by impaired hearing are sometimes considered as problems in retardation or behaviour if their hearing loss is not discovered by an educational survey or other means. In addition to the inherent educational problems there are also problems of social and emotional adjustment for the teacher with a hard of hearing child in her class to consider.

12 POINTS TO REMEMBER (continued)

10. As a rule hearing defects are classified as follows:
    a moderate loss is one in which the average loss is better than 20 decibels and other factors are satisfactory.
    a moderately severe impairment is one in which the loss is 20 decibels or more in the better ear or where the medical, social, educational and emotional factors are not entirely favourable.
    Pupils with a moderate loss are usually placed near the front with the better ear toward the class and the teacher.
    a severe hearing loss is one in which the average loss for both ears is 35 to 40 decibels or more. These children often require lip reading or speech lessons and a desk where the light will fall on the teacher's lips.

11. Children for whom a hearing aid has been recommended by medical authorities are sometimes helped to secure this by enlisting the interest of a local service club in the problem.

12. The headphones used in the Massachusettes test are specially adapted and are not inter-changeable for use in any other type of audiometer.

AUXILIARY EDUCATION BRANCH

MASTER SHEET (A)

MASSACHUSETTES HEARING TEST

EXAMPLE:

1	yes	no	
2	yes	no	
3	yes	no	(512)
4	yes	no	
5	yes	no	
6	yes	no	

1

RIGHT EAR

A.	1	yes	no	
	2	yes	no	
	3	yes	no	(512)
	4	yes	no	
	5	yes	no	
	6	yes	no	
B.	1	yes	no	
	2	yes	no	
	3	yes	no	(4096)
	4	yes	no	
	5	yes	no	
	6	yes	no	
C.	1	yes	no	
	2	yes	no	
	3	yes	no	(11,584)
	4	yes	no	
	5	yes	no	
	6	yes	no	

Total 3

2

LEFT EAR

A.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
B.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
C.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no

Total 5

AUXILIARY EDUCATION BRANCH

MASTER SHEET (B)

MASSACHUSETTES HEARING TEST

EXAMPLE:

1	yes	no	
2	yes	no	
3	yes	no	(512)
4	yes	no	
5	yes	no	
6	yes	no	

1

RIGHT EAR

A.	1	yes	no	
	2	yes	no	
	3	yes	no	(512)
	4	yes	no	
	5	yes	no	
	6	yes	no	
B.	1	yes	no	
	2	yes	no	
	3	yes	no	(40.6)
	4	yes	no	
	5	yes	no	
	6	yes	no	
C.	1	yes	no	
	2	yes	no	
	3	yes	no	(11,584)
	4	yes	no	
	5	yes	no	
	6	yes	no	

Total 4

2

LEFT EAR

A.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
B.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
C.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no

Total 3

AUXILIARY EDUCATION BRANCH

MASTER SHEET (C)

MASSACHUSETTES HEARING TEST

EXAMPLE:

1	yes	no	
2	yes	no	
3	yes	no	(512)
4	yes	no	
5	yes	no	
6	yes	no	

1

RIGHT EAR

A.	1	yes	no	
	2	yes	no	
	3	yes	no	(512)
	4	yes	no	
	5	yes	no	
	6	yes	no	
B.	1	yes	no	
	2	yes	no	
	3	yes	no	(4096)
	4	yes	no	
	5	yes	no	
	6	yes	no	
C.	1	yes	no	
	2	yes	no	
	3	yes	no	(11,584)
	4	yes	no	
	5	yes	no	
	6	yes	no	

Total 4

2

LEFT EAR

A.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
B.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
C.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no

Total 6

AUXILIARY EDUCATION BRANCH

MASTER SHEET (D)

MASSACHUSETTES HEARING TEST

EXAMPLE:

1	yes	no	
2	yes	no	
3	yes	no	(512)
4	yes	no	
5	yes	no	
6	yes	no	

1

RIGHT EAR

A.	1	yes	no	
	2	yes	no	
	3	yes	no	(512)
	4	yes	no	
	5	yes	no	
	6	yes	no	
B.	1	yes	no	
	2	yes	no	
	3	yes	no	(4096)
	4	yes	no	
	5	yes	no	
	6	yes	no	
C.	1	yes	no	
	2	yes	no	
	3	yes	no	(11,584)
	4	yes	no	
	5	yes	no	
	6	yes	no	

Total 2

2

LEFT EAR

A.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
B.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
C.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no

Total 6

AUXILIARY EDUCATION BRANCH

MASTER SHEET (E)

MASSACHUSETTES HEARING TEST

EXAMPLE:

1	yes	no	
2	yes	no	
3	yes	no	(512)
4	yes	no	
5	yes	no	
6	yes	no	

1

RIGHT EAR

A.	1	yes	no	
	2	yes	no	
	3	yes	no	(512)
	4	yes	no	
	5	yes	no	
	6	yes	no	
B.	1	yes	no	
	2	yes	no	
	3	yes	no	(4096)
	4	yes	no	
	5	yes	no	
	6	yes	no	
C.	1	yes	no	
	2	yes	no	
	3	yes	no	(11,584)
	4	yes	no	
	5	yes	no	
	6	yes	no	

Total 5

2

LEFT EAR

A.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
B.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no
C.	1	yes	no
	2	yes	no
	3	yes	no
	4	yes	no
	5	yes	no
	6	yes	no

Total 1

USING THE PHONOGRAPHIC GROUP AUDIOMETER

(a) The group audiometer is made in the following types: - Those instruments using a record on which is played the sound of a human voice usually saying numbers -

(1) the old type in which 10 to 40 ear-phones are operated on a magnet.

(11) the new type in which 10 to 40 ear-phones are operated by batteries.

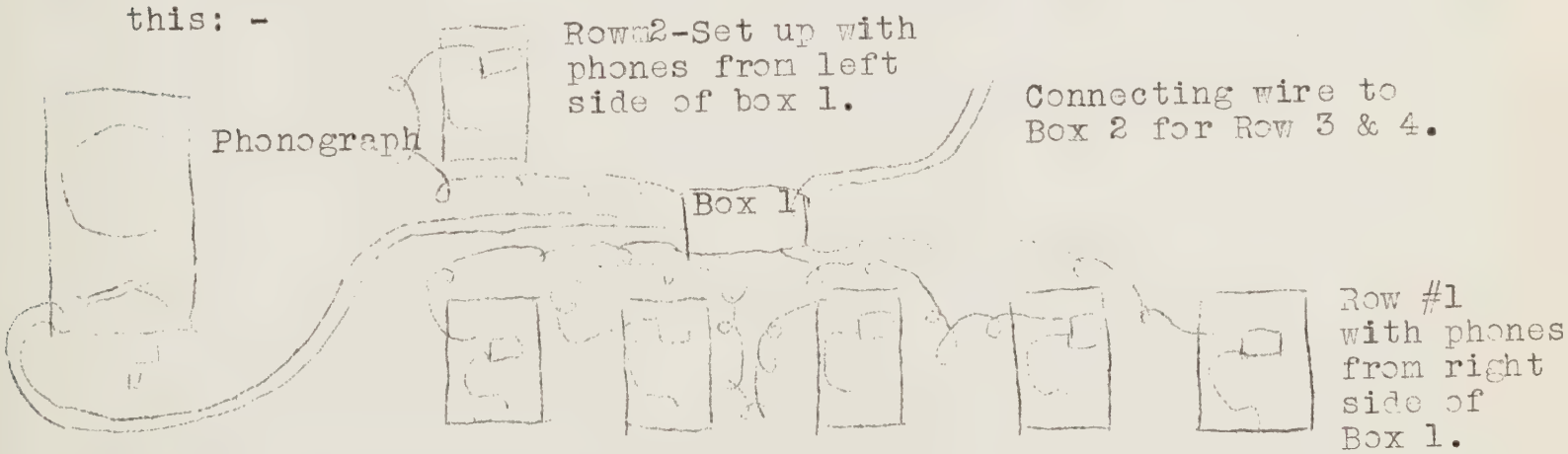
(b) Those instruments in which a group of pupils hear electronic pure tones.

PREPARATION OF THE MACHINE FOR USE

I - Unpacking the ear-phones

If the ear-phones have been properly packed, the containers can be set in the aisle and five ear-phones can be placed on the desks on either side. Since there are usually two boxes, it is usual to use 4 rows of desks for 20 ear-phones.

The wires must be connected to the phonograph part of the group audiometer. Since each box has a connecting wire and a plug-in receptacle, this can be done by plugging in one wire into the machine and the other one into the receptacle for it in the box which is connected to the machine. The hook-up looks like this: -



2 - WIPING THE EAR-PHONES AND PADS.

Before using the ear-phones after they have been unpacked, the ear-phone and the leatherette pad must be wiped with rubbing alcohol. This is done after each group has been tested. (In the Fort William Survey it was found that this process could be expedited if the pupil held it out for the teacher to cleanse before the pupil left his seat.) A sterile cotton pad is used.

3 - ASSEMBLING THE PUPILS

There are several methods but it is suggested that the technician first give the test to the teachers of the school and ask them to instruct their pupils on the purpose and method of undergoing the group audiometric test. This should eliminate fears that the test is something strange, wonderful or novel.

It is wise for the technician to arrange his day so that the teachers may take the test at 8.40 a.m. or 1.10 p.m. The teachers can then take the record forms with them to their rooms and direct their pupils to fill in the necessary data.

The teacher of the classroom can bring in twenty pupils and remain with them for the test. Where it is not possible for the principal to summon new groups on a 15 minute or 20 minute schedule, a pupil may wait outside the door to go for the next group when a paper is shoved out under the door.

4 - SELECTING A ROOM FOR A HEARING TEST.

The room should be as far away as possible from street noises. It should not be under another class. End rooms are favoured if they meet the first two conditions.

During the hearing survey school noises may invalidate the test. The following are some of the conditions which should be avoided: -

(1) Class singing or unison answering in any class in the school.

(2) Opening and slamming of doors.

(3) Movement of pupils in the halls during the conduct of the test with each group of 20.

(4) Repair work in the school.

(5) Conversations between teachers and pupils in the halls.

(6) The ringing of bells or pounding in the manual training class.

5 - INFORMING AND WARNING THE STAFF OF THE NEED FOR QUIET.

This can be done best at the time the teachers undergo the test themselves. Technicians have had to ask the janitor to oil the hinges of doors which squeaked during the conduct of a test of one group of pupils. The teachers should be told of the noises and conditions mentioned in Section 4 above.

6 - INSTRUCTING THE PUPILS

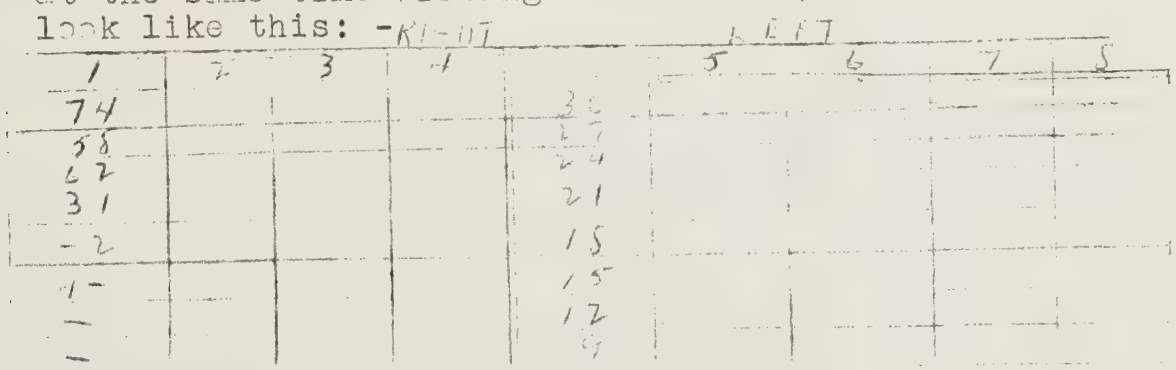
(a) Seating - The pupils should be directed or led down the aisles in which there are no connecting wires and seated at desks which have ear-phones.

(b) Recording - Each pupil having brought his own previously prepared record sheet will place it on top of the sheet on the desk. (Sheets of drawing or construction paper should be placed on each desk. The purpose of the sheet is to deaden the sound of writing the numbers heard through the ear-phones. When this extra sheet is not placed on the desk, the noise of 20 children writing numbers is quite disturbing.)

The teacher in the classroom or the technician in the testing room will have prepared a diagram on the blackboard similiar to that on the pupil's record sheet. The technician will read Instruction 2 as follows from a record sheet (Hearing Test Chart).

"You will hear numbers spoken by a person who is moving away from you. The voice will get weaker and weaker. Listen carefully and write as many numbers as you can."----------

"I will give you some examples and use the chart on the blackboard." (Put your numbers in the spaces in Column I. Always start at the top one and go down the column with each succeeding pair of numbers. Start with a fairly loud voice and speak each succeeding pair of numbers in a lower voice, - at the same time writing the numbers). Your example would look like this: -



Note - Advise the pupils to put in a stroke for each number they miss.

(c) ADJUSTING THE EAR-PHONES

The technician should demonstrate the adjusting of the ear-phones

Stretch the wire band and place the head phone on the right ear.

Lastly bring the pad down on the left side of the head.

NOTE - The wire spring is stiff and should be held until the pad is comfortably in place.

(d) TRY-OUT

Start the phonograph with the record for the Right Ear - Warn the pupils that they are not to write the answers. They are to listen to make sure that the ear-phones are working. Stop the phonograph after five or six numbers have been given.

NOTE - Unless they are supervised carefully you may find that some pupil hear nothing because the ear-phone is twisted in the holder. Tell the pupils that the hole in the ear-phone must be next to the ear.

7. CONDUCTING THE TEST

Start the record again and tell the pupils to write their answers in column 1.

When the record is finished, stop the machine, wind it up again and turn the record over. Have the pupils put the ear-phones on the other ear and when you have checked them all, give the test for the left ear.

NOTE - As soon as the test for the left ear is finished, give the signal for the next group to assemble in the hall.

(8) - CLEANING THE EAR-PHONES

With some rubbing alcohol on a piece of sterile cotton batting, the technician and the teacher can quickly cleanse the phones and the pads, if the children hold them out to them.

NOTE - A container or piece of corrugated paper is useful to hold those pads which will otherwise remove varnish on desks.

(9) - DISMISSING THE GROUP AND COLLECTING RECORDS

You will likely have to warn the pupils to keep out of the aisles in which there are connecting wires. The teacher who accompanied the group can collect the records as the children pass out the door.

(10) - MARKING THE RECORDS

This is a task for the class teacher. A sufficient number of marking stencils should be made so that each teacher will have one. One copy of each of two types of marking stencil is in the machine.

Teachers should circle all numbers which are incorrect. They must disregard the order in which they are written, e.g. 42 is acceptable if it is written 24 since that shows that the child heard the two numbers. It is recommended that the teachers mark the errors in the 12 deb. line and the lines below.

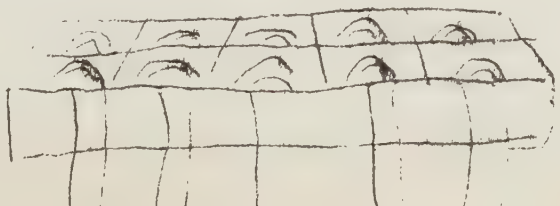
(11) - DIRECTIONS FOR OPERATING

These are inside the cover of the phonograph unit. The testing record should be played and the settings made each half day. A new needle should be used with each record.

(12) - PACKING UP

(a) Place the wire loop through the wires just above the ear-phone like this:

(b) Set the ear-phone in the receptacle to which it is wired: -



(c) - Gather up the wires on one side and make them into a slip knot; Do the same on the other side.

NOTE - DO NOT TWIST each wire around ear-phone.

NOTE - A great deal of instructing can be saved if the classroom teachers do a good job of explaining what the pupils will experience.

MARKING AND RETESTING

Complete failure on the 9 - decibel line and below shows the need for a re-test. Complete failure on one side is a sufficient reason for giving a retest.

More retests will likely be needed for Grade IV pupils than for Grade V pupils or any senior grade. It is usual to use the group Audiometer for Grades IV to VIII inclusive, in the Elementary School.

You are likely to find pupils who were unaware of any difference in the hearing acuity of their two ears.

All pupils who fail on the 9 - decibel line in the retest should be given a Sweep Test on a clinical audiometer. Failures on the sweep test should be given a full test.

The directions for the use of the pure-tone audiometer are available. The electronic pure-tone group audiometer is not yet used in Ontario. Approximately 60 pupils per hour can be tested on the phonographic type of audiometer.

USING THE CLINICAL AUDIOMETER

The Clinical Audiometer may be used for a Hearing Survey by giving what is known as the Sweep Check to each individual pupil. Where a pupil has failed on two successive group tests. the Sweep Check should be given. Should the pupil fail on the Sweep Check, a complete individual examination must be given.

I DIRECTIONS FOR ADMINISTERING THE SWEEP CHECK TEST

(Test No. 3 in a Survey)

An explanatory description of what the child will hear is given. It may be something like the following: -
"You are to listen for sounds which may seem to you to be like train whistles, boat whistles, squeaks, the dial tone on the telephone, radio squeals or aeroplanes. Some boys say some of the sounds are like a jet plane. I want you to listen for these sounds on this ear-phone. I may even ask you to hum some of the sounds or tell me what some of them are like."
"Now----------, place this ear-phone over your left ear."
(Instruct girls to push back their hair. Instruct both boys and girls against holding the ear-phone too close to the ear.)
Set the Hearing Loss Setting at 15 decibels and the Frequency Setting at 1024. Have the pupil instructed to signal if he hears a sound. In some cases, the pupil can be taught to respond by raising his hand. Another method is to clench the hand if a sound is heard and to unclench it when there is no sound. There is always the verbal response or the nodding of the head if the examiner prefers that.)

The sequence of Frequency Settings for each ear is as follows: -

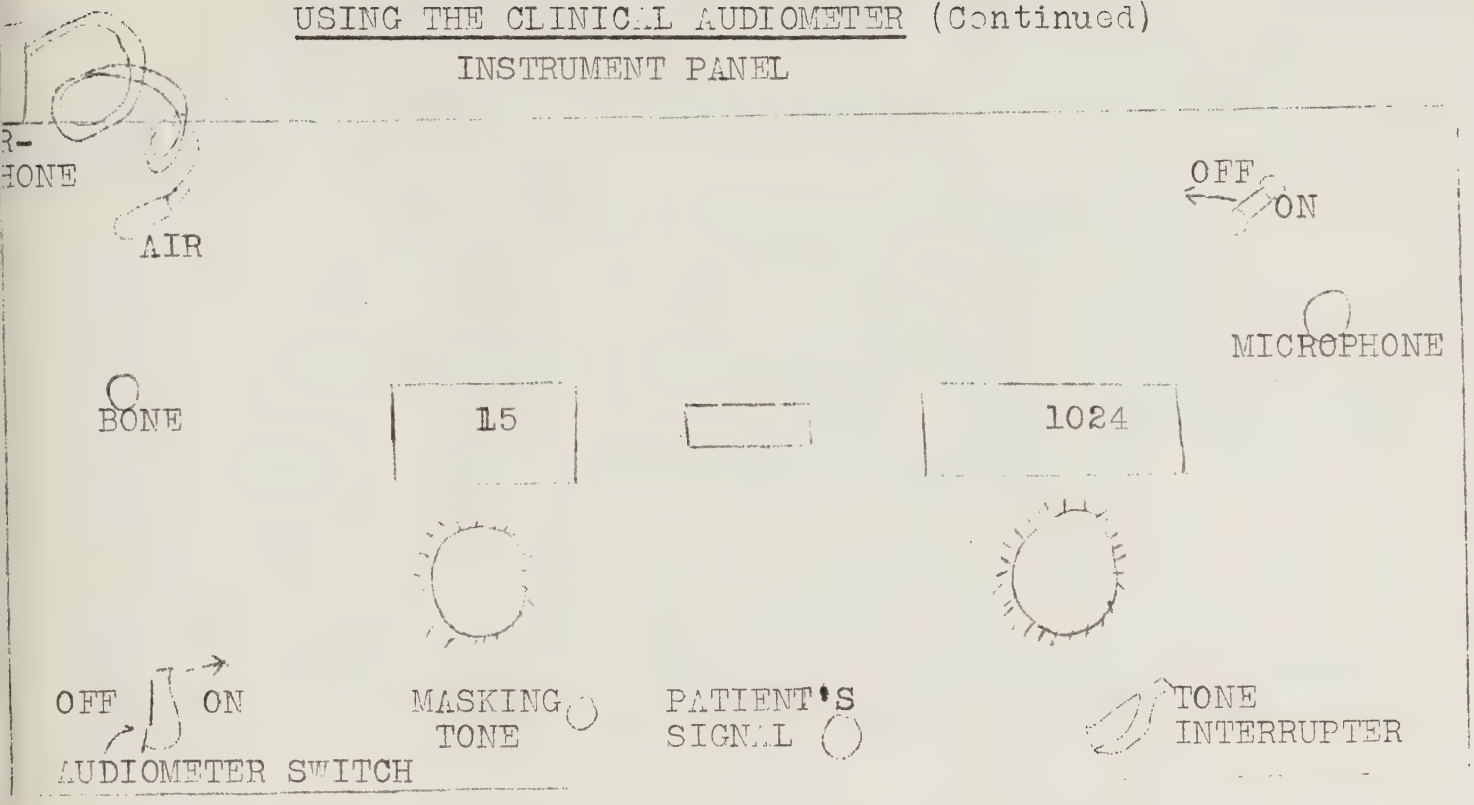
1024
512
256
128
256
512
1024
2048
2896
4096

When the left ear is finished, give the sweep check test on the right ear. At least once in the test, the Tone Interrupter should be pressed down to check on the response of the pupil. (The pupil may sense that the examiner wants him to indicate that he can hear and may be willing to oblige.)

The card can then be marked for a successful pupil by drawing a straight red line at 15 deb. on the record card for results on the left ear. A blue line should be used for the right ear.

USING THE CLINICAL AUDIOMETER (Continued)

INSTRUMENT PANEL



SETTING FOR BEGINNING SWEEP CHECK

NOTE - The pupil should not see the instrument panel while the test is being conducted. In the early stages of operation, the examiner may make the following mistakes: -

(1) Failing to turn the Audiometer switch to the "On" position;

(2) Turning the microphone switch to the "On" position instead of the "Off" position.

II DIRECTIONS FOR GIVING THE COMPLETE AUDIOMETRIC TEST

If the Sweep Check Test has been given it will not be necessary to repeat the following explanatory description of what the child is to hear: -

"You are going to have a chance to show me how well you listen. Put this head-phone over your left ear but do not hold it too closely. (Examiner now switches quickly through various Frequency Settings at a Hearing Loss Setting which he can hear.)

"This head-phone is just like a telephone receiver but it is covered with sponge rubber so it won't hurt your ear. Hold it right up to your ear and listen closely."

"Some people hear best when they hold it close to the ear; others hear best when they hold it a little more loosely. Try it both ways until it seems comfortable and you hear quite well."

USING THE CLINICAL AUDIOMETER (Continued)

.... When you heard the different sounds did you hear a boat whistle? the dial tone on the telephone? a radio squeal? the sound of an aeroplane?

(With older children stress "the dial tone on the telephone. With very young children stress bombers and aeroplanes.)

"When the aeroplane is very far away, you will not hear it; but as it comes closer you will gradually hear it, although at first it may be very faint and far away. Nod your head and say "Yes" when you first hear it by watching the expression on your face. In case I don't see you smile, I may ask you to press this signal button or to tell me what you hear."

(Commence the test with the Frequency Setting at 1024. Turn the Hearing Loss Setting knob until you find the setting at which the pupil can just hear.) Sometimes it is better to go on with another frequency setting instead of waiting too long with one particular tone. The examiner can return to his incompleted setting.

The Frequency Settings should be made in the following order for each ear: -

1024
512
256
128
64
1024
2048
2896
4096
5792
8192
11584

The examiner should record the results on the record card as follows: - X - left ear
O - right ear

It is wise to have a pad handy on the desk so that additional notes can be made. Speech defects should be noted if they are evident during the examination. A whisper or voice test should be given occasionally as a check on the validity of the results you are getting on the audiometer. Directions for administering such a test are included.

TEST OF HEARING Second REVISION - November 1949

Directions

Hearing loss may be in one range. Pupils may not hear high, medium or low pitch sounds. This may effect their spelling and speech. Examples of High Sounds are SH, S, T, H, P, CH, C. Medium Sounds are W, NG, L, B, R, D, N, M. Low Sounds are O, I, E, U, AW, V, EE, AY, CW, AH, OO, IGH, The test is arranged so that you can record the correct and incorrect responses and can also indicate no response. The phonic elements are given so that you may check those to which the pupil fails to respond.

A quiet room is necessary.

Seat the pupil about twenty feet away from where you are recording. The pupil's back must be towards the examiner and the ear which is not being tested should be stopped with a handkerchief held over the ear. (With the palm of the hand held over the ear not being tested.)

A preliminary practice should be given in which the pupil repeats words spoken or whispered by the teacher. The following words and numbers are for practice - 17, white, Wednesday, ugtop, 59, Thursday, 95, satisfactory, locomotive. These should be given first in an ordinary voice and then repeated in a whisper.

The pupil must be told to repeat exactly what he hears whether or not the words are sensible or nonsense words.

The words in the list are whispered. The whispered words should be given just after a breath has been expelled from the lungs and before another breath is taken in. If no response is elicited the word may be repeated once.

The right ear should be tested first taking the words in the order given. During this part of the test the left ear is covered as described above. The right ear must be covered while the left ear is being tested. The words are given in the same order for each ear.

The responses of the pupil are marked as follows: (1) for correct responses use the plus sign; (2) for complete lack of response use the minus sign; (3) where the response is in error write it out in full; (4)If the error is an omission circle the sound omitted. (This is the reason for setting the words out in phonetic spelling.)

To summarize, circle the omissions and put a rectangle around the substitutions. One error may mean little but the repetition of the error may be significant.

When the pupil cannot hear a whisper at 20 feet he may be tried at 15 feet and 6 feet. It may be necessary to use a low voice.

Second REVISION - November 1949

Hearing Test Record Pupil's Name

	RIGHT EAR		LEFT EAR	
Word	Phonetic Spelling	Examiner's Record	Phonetic Spelling	Examiner's Record
shut	sh-u-t		sh-u-t	
wish	w-i-sh		w-i-sh	
mother	m-u-th-r		m-u-th-r	
both	b-o-th		b-o-th	
six	s-i-k-s		s-i-k-s	
children	ch-i-l-d-r-e-n		ch-i-l-d-r-e-n	
watching	w-ah-ch-ing		w-ah-ch-ing	
visited	v-i-z-i-t-e-d		v-i-z-i-t-e-d	
five	f-igh-v		f-igh-v	
covered	k-u-v-r-d		k-u-v-r-d	
tables	t-ay-b-l-z		t-ay-b-l-z	
gather	g-ah-th-r		g-ah-th-r	
company	k-u-m-p-a-n-y		k-u-m-p-a-n-y	
morning	m-or-n-ing		m-or-n-ing	
himself	h-i-m-s-e-l-f		h-i-m-s-e-l-f	
ready	r-e-d-y		r-e-d-y	
orders	or-d-r-z		or-d-r-z	
could	k-oo-d		k-oo-d	
little	l-i-t-l		l-i-t-l	
what	wh-aw-t		wh-aw-t	

This examination is given at 20-15-10-6 feet using:
(a) whispered words or
(b) words spoken in a low voice.

NOTE - Circle the omissions and substitutions noted above.

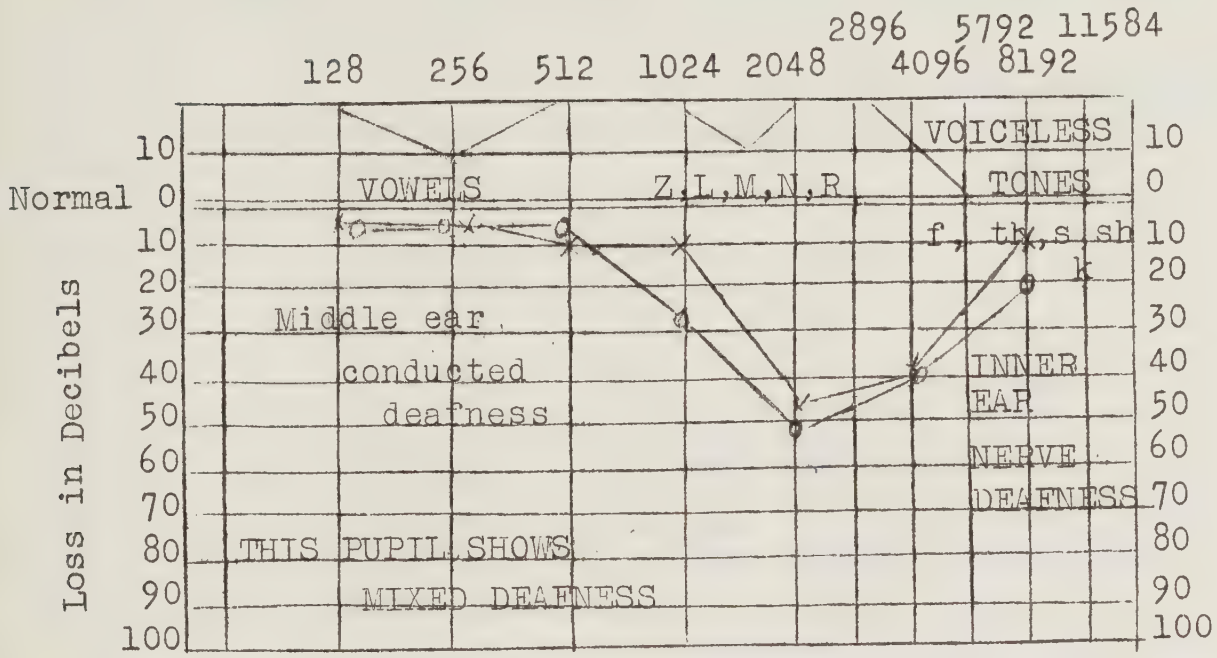
Examiner_____

Date_____

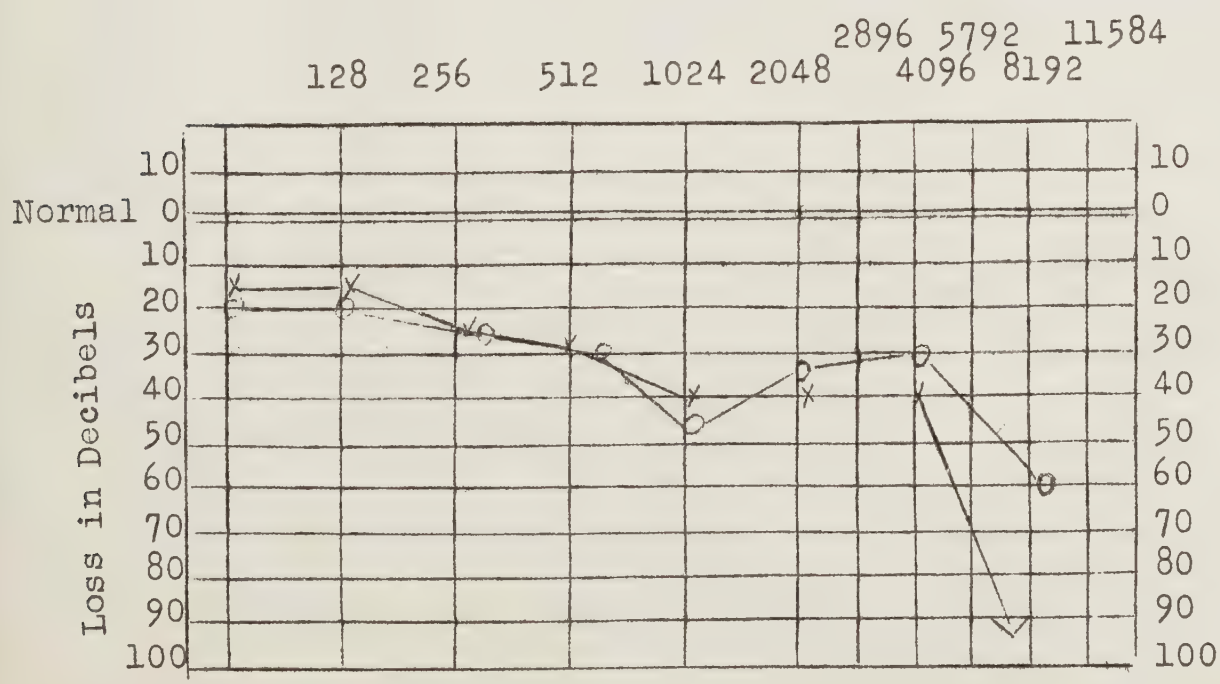
Some Sample Audiograms

and their Educational Implications

prepared by Miss Marjorie Philips, Toronto



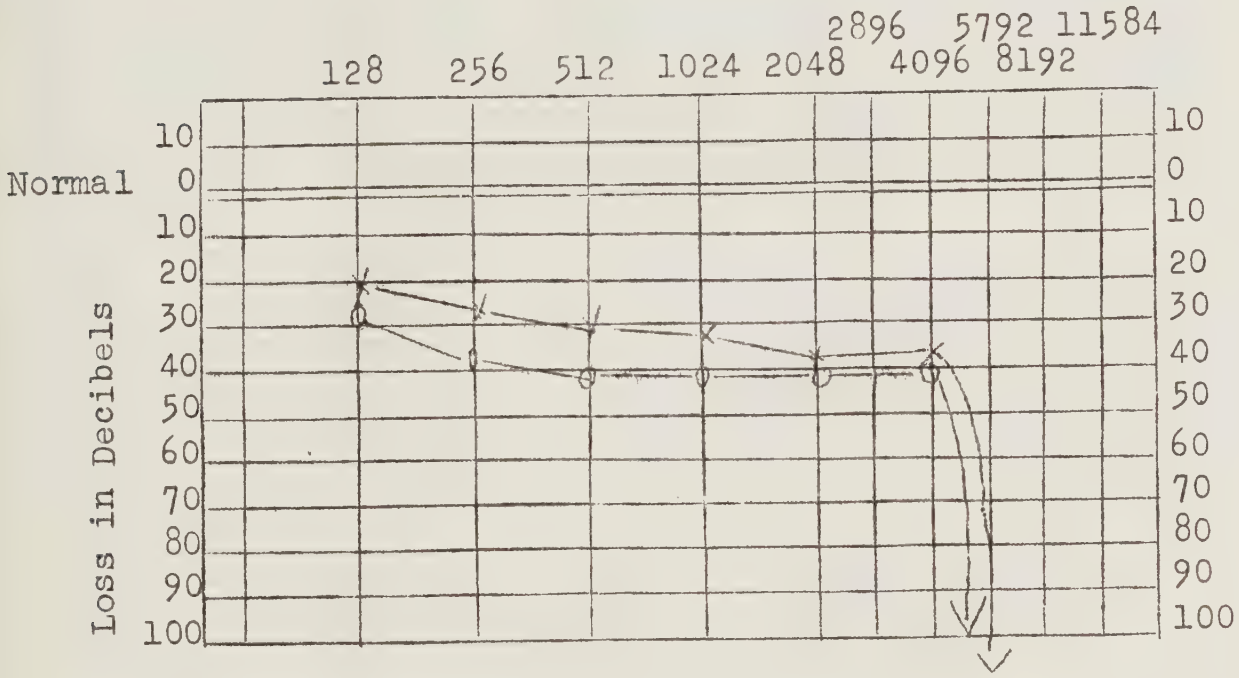
The audiogram below is that of a 9-year-old boy whose mother and brother are hard-of-hearing. He had pre-school measles and chicken pox. He shows inner and middle ear deafness and needs lip reading.



This pupil is a 7 year-old boy who has a running ear and occasional ear aches.

His audiogram shows an inner ear impairment. Although of average intelligence, he is one year retarded. His school progress has suffered through his hearing loss about which he is sensitive and discouraged.

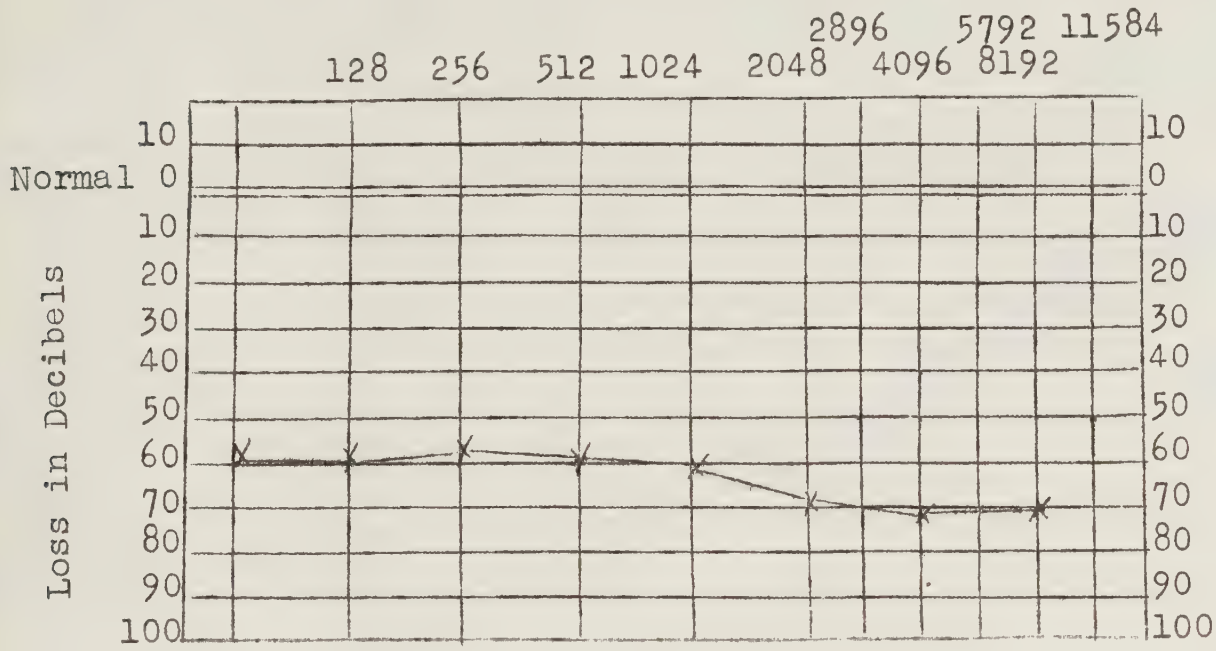
He probably does not need a hearing aid, as he would not get enough out of it; but he should sit at the front of room and have help in lip reading.



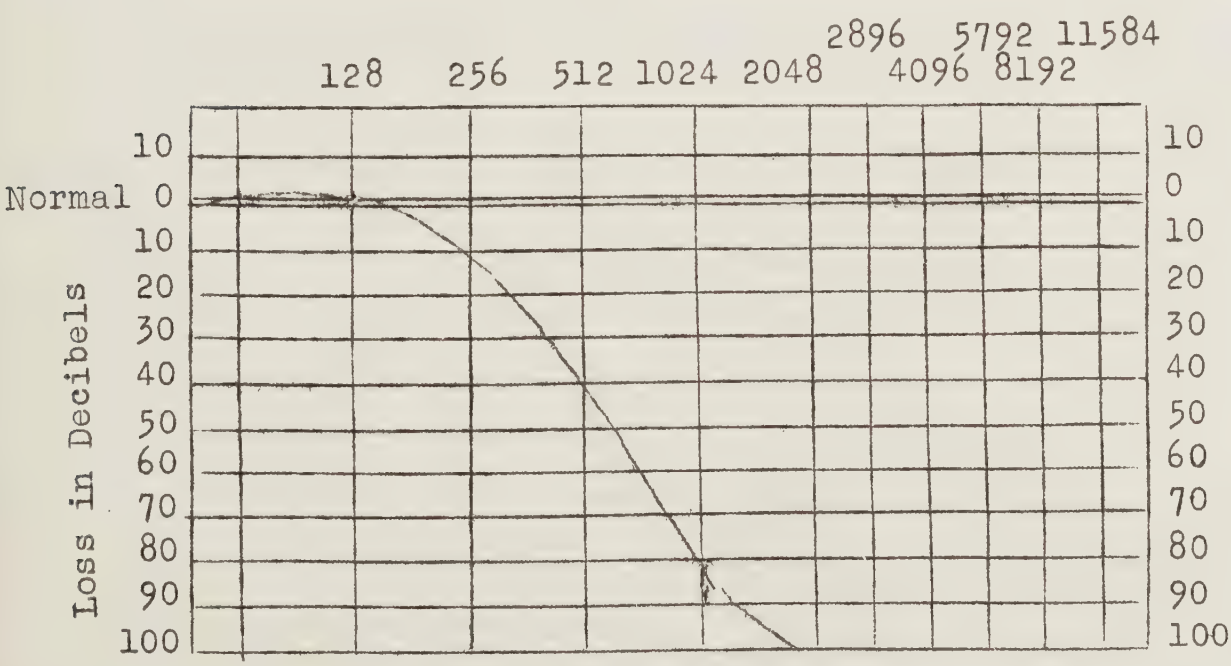
<u>Note</u> - A 20 decibel loss is about 15%.
A 9 decibel loss for speech warrants a retest below 6th grade.
A 6 decibel loss for speech warrants retest above 6th grade.
A loss in high frequency denotes inner ear impairment.
A loss in all frequencies denotes middle ear impairment.
In individual testing, four frequencies are less fatiguing for child and saves time -
512, 2048, 4096, 8192 <u>or</u> 256, 1024, 4096, 8192

The audiogram below shows conductive deafness. He will ask you to speak louder.

In conductive deafness, talk loudly to the pupil. It is severe but not total. He can do factory work.



This audiogram shows nerve deafness, the only deafness that is total. Don't talk loudly to this pupil. If there is noise, he is unable to sort out difference in tone. Due to degeneration of nerve cells, the loss is usually uneven and there may be a gradual or a sudden drop in high frequencies. A quiet job is best for him. He will say, "I hear you, but I don't know what you say?"



REPORT ON THE INTERNATIONAL CONFERENCE OF EXCEPTIONAL CHILDREN

CHICAGO

March 19th to 22nd, 1950

Reported by Miss Mary Secord, Brantford
C. E. Stothers, Toronto.

Executive Committee Business

It was recommended that a Provincial Chapter be formed with the presidents of the local chapters or their alternates acting as the officials. Such a chapter would solicit membership in the areas where chapters have not been organized.

An Ontario Chapter could hold its business meeting during the O. E. A. at Easter and could serve teachers and parents who do not wish to pay their fees to existing chapters.

List of the Canadian I.C.E.C. Chapters with their Officers

Chapter #9 - Central Ontario Chapter -
Miss Florence Malcolm, 33 Lansdowne Ave., Galt, Ont.

Chapter #22 - Hamilton Chapter -
Mr. Aldon Hasty, Geo. L. Armstrong School, Concession St., Hamilton, Ont.

Chapter #41 - Saskatoon Chapter -
Dr. A. D. Thomson, Superintendent of Schools, 211, 4th Ave. South
Saskatoon, Saskatchewan.

Chapter #56 - Toronto Chapter -
Miss Victoria Mullen, 305 Beech Ave., Toronto, Ont.

Chapter #81 - London Chapter -
Miss Edna McCallum, 222 Epworth Ave., London, Ont.

Chapter #87 - Ottawa Chapter -
Miss Myrtle Reid, 276 Second Ave., Ottawa, Ont.

Chapter #125 - Windsor Chapter -
Miss Marion Francis, 503 Asken Blvd., Windsor, Ont.

The membership in the International Council is as follows:

United States -	5431
Canada -	189
South Africa -	63
South America -	7
Australia -	5
Europe -	26
Asia -	5
	5726

The Delegate Assembly

The Delegate Assembly passes on all the business of the International Council. It is composed of voting delegates elected by each chapter. Each chapter is entitled to one voting delegate for the first ten members and one additional delegate for each additional twenty members or major fraction thereof.

Business of special interest to Canadians transacted at the Chicago Convention was as follows:

(1) A full-time executive secretary is to be employed with offices in the National Education Association Building in Washington;

(2) The annual fees which include a subscription to the Journal of Exceptional Children were raised from three dollars to four dollars per annum.

(3) Re-appointment of C. E. Stothers as Canadian Regional Director.

(4) The 1951 Convention City is to be selected by the executive committee and is to be in Eastern United States. The cities receiving the highest votes were New York and Philadelphia.

Reports On The Programme

Section 1 - Administration Section - Monday March 20th, 1950.

Relationship Between The Programme Of Special Education In Rural And Urban Areas In Pennsylvania - by Dr. L. N. Myer, Chief, Division of Special Education, Department of Public Instruction, Harrisburg, Pa.

In 1937 the legislation was passed under which 33 county supervisors of special education were appointed. The appointees were required to hold teacher's certificates and to have training as psychologists. Medical examinations were also provided for all pupils in the schools by a medical doctor and a nurse with the requirement that not more than four medical examinations could be done in one hour.

In the first three years, the number of pupils receiving hospital or homebound education was increased 400%. The rural supervisor found it worthwhile to promote kindergartens and to interview parents. In explaining the educational needs of the child to his parents, the supervisor had to invent a new educational language. The work of the rural supervisor embraced the problems of all types of handicap and provided a person with knowledge of all special educational agencies on call to the rural schools.

Special education in Pennsylvania has had to supply its own guidance but does supply a needed service to the rural school.

In 1950-51, the Pennsylvania Schools will have under trial some projectors on which the pages of a book can be magnified. This machine has been developed by the Franklin Institute of Philadelphia.

A Place For The Exceptional Child In The Secondary School
Miss Hester C. Burbridge, Evanston, Illinois
Miss Amy O. Allen, Columbus, Ohio
Miss Anna Engel, Detroit, Michigan.

Miss Burbridge

Until recently an exceptional child could not get into a secondary school. Since the State of Illinois provides for the excess cost of a programme, in 1949 youths who cannot speak well or have an emotional difficulty were admitted.

A special counselling service is provided in which abilities, achievements and interests are studied before a place is found for him in the junior high school. A full time psychologist makes a particular study of the child's mental health and then assigns the pupil to a home room.

Status is needed by backward children. For this reason a parents group has been organized to support the plan. A social worker gives individual help with each child's social problems. Experience shows that a well-trained personnel is urgently needed.

Miss Allen

State department employees are constant floaters and are always on the look-out for things which may cause improvements. In Ohio, it is a first principle in organization to encourage the local school sections to make such initial provisions as will receive local support.

One Junior High School group asked the principal of the local school the things that the Ohio officials wanted. Miss Allen approached the local High School teachers with the following thoughts:

(1) If 12 years of school is good for the normal person how much more is it needed for the retarded;
(2) Pupils grow out of their clothes and the retarded group grow socially but even if they cannot do bookwork there are some things they can do well;
(3) All teen-agers need to have certain experiences and if they miss them this may create a risk to the whole community;
(4) The relief rolls are full of the names of people who left school maladjusted;
(5) We want to develop social and occupational competency which involves giving these children guidance in the skills of response, dress and action.

Special classes in secondary schools have been opened in 27 cities in Ohio. There are 50 classes serving about 900 pupils. Some pupils develop sufficiently to get a Junior High School Graduation Certificate although the I.Q. is under 80. In reading they get as high as the Grade 6 level. Several pupils have become team stars in basketball and football. One boy was elected as home-room representative.

The problems faced by the teachers are as follows:
(1) in a large building, the pupils need help in finding the different classrooms;
(2) in a rigid departmental programme, it is very difficult to fit the pupils in;
(3) the teacher needs to write down materials for a Grade 9 class to the pupil's reading level;
(4) the secondary teachers have never sat on a kindergarten chair;
(5) goals need to be stated in terms which teachers, parents and the community recognize as real.

Miss Engel

We have experienced the day when the leaving age was 14 - later it was 16. Now it is to be 18.

The mentally handicapped have been carried through these increasing school terms in the hope that they would handle themselves. They need teaching, counselling and guidance services and are a part of the junior and senior high schools.

The first secondary class was requested by parents who had gone to see the superintendent. He asked for a volunteer and secured an exceptionally good special class teacher who was given secondary school status. It is wise to give the H.S. principal opening a new class the best special class teacher you can find.

Some of the students admitted to these classes get real bona-fide diplomas from the high schools. A young coloured boy from a special class was president of a senior high school organization.

A General Motors Employment Service official asked, "Why do you label them? When they are labelled, they can't get jobs. I don't hire graduates of a special school. I hire Joe Doakes."

When asked what he tought should be taught he said "Teach him to be on time, to be clean, and how to get along with other people. I can teach him what he has to do at this machine in twenty minutes. He will have to do a repetitive job. We have engineers thinking up new ways to have a machine do our work more cheaply."

I would emphasize for the special class pupil that you stress the things he can do, not the things he can't. Many of them can work in trade schools but not on their own. They need their own academic teachers if they go to a trade school.

The Parent Is Also A Teacher - Dr. Freda Kehm, Director, Association for Family Living.

Emphasis is on meeting emotional needs of the child. Association has been educating parents on emotional needs of children. Parents must learn to accept their shame etc. re handicapped children as natural. Then can learn to help emotional needs of their child. Parents must accept the reality of the handicap. Parents can resent or over protect child. Parents must realize the assets of the situation. Handicap should not be a taboo subject.

Heredity sets the limits but environment affect the development. Relationships in the home affect the relationships in life. Importance of mother-child relationship is not affected by occasional hostility. Love must be shown but there should not be over protection or pity.

Emotional Needs Of The Child:

1. Love
2. Security - feeling of belonging - acceptance of the child as he is and not pressed for impossibilities - association with other children.
3. To identify himself with a parent - need to find out things for himself.

Needs for Good Emotional Development

1. Child's world should be predictable to him.
2. Intelligent discipline - too much freedom gives too much responsibility.
3. Time to absorb opportunities - do not force too many stimulations upon children.

In the panel discussion which followed Dr. Irene Josselyn, M.D., Psychoanalyst, Highland Park, said that the emphasis should be on the total child not the handicap. Give the child feeling that parent loves the child not the handicap so he will not grow up to utilize the handicap.

Sight Saving Section - Monday March 20

Providing A Good Visual Environment In The School And Home - Mr. A. C. Sangster, School and Church Lighting Specialist, Detroit Edison Company.

Adequate lighting intensity - artificial lighting 30 ft. candles for average classroom. No bare fluorescent tubes.

Brightness ratio comfortable
1. Adequate control of daylight.
2. Flat white ceiling and flat pastel walls with good reflection factor.
3. Green chalk board.
4. Desk surface with reduced glare - no wax or polish - blonde coloured desks - no dark surfaces.
5. Floor finish should be light, no pattern.

Basic Rules for Lighting
1. Be sure fixtures are properly lamped.
2. Fixtures kept clean.
3. Paint should be clean.
4. Blinds in good condition.
5. Desk tops light colour.
6. Teacher should stay away from the windows when talking to the class.

Home Lighting - same rules as for school
1. Suitable place to study.
2. Light desk.
3. Eye 14" above the desk.
4. Indirect lighting is very necessary.

Address illustrated by many slides showing the remodelling of old schools to meet these requirements.

Evidence of Subnormal Vision in Children and Possibilities for Treatment - George P. Guibor, M.D.

Characteristics of Subnormal Vision in Babies
1. Albino.
2. Head-nodding spasm.
3. Cerebral palsy.
4. Too small eyes.
5. Abnormal size of pupils.
6. If he does not look at a flash-light.
7. Strabismus.
8. Defective fixation.
9. No blink reflex at five months or over.
10. Holds object too close.

In almost all cases the speaker stressed the great importance of discovering defects early if there was to be any success in treatment. His address was therefore of more interest to parents or pediatricians. He illustrated his talk with slides showing the correction of cross-eyes by means of drops, oculsion, glasses and surgery.

General Session - The Socially Maladjusted Child
(1) Educational Implications - Dr. Havighurst, University of Chicago.
(2) Environmental Implications - Dr. Shaw, Institute For Juvenile Research.
(3) Cultural Implications - Dr. Davis, University of Chicago.

Dr. Havighurst

There are three types of social maladjustment as follows:
1. the aggressive person;
2. the shy person;
3. the person adjusted to a delinquent environment.

The only way to provide proper treatment is to make an individual programme for each child. This makes it necessary to improve school curricula and methods which must be broad enough to provide rewards to all.

Two cases were given where the father did not pull his weight and there were other educational and social conditions where children could not evolve good relationships in school.

Dr Shaw

The delinquent has violated the law. This is a poor definition of a type which is difficult to define.

Children who violate the law do not go around seeking aid or asking to be cured. Plans for cure are very difficult if not impossible to project because any rehabilitation depends on powers within the individual. Because of some failure, obstruction or interference in his normal social relations, the individual cannot satisfy his social needs.

Each case must be studied individually to find those powers within the person on which his rehabilitation depends. An example was given of a community which successfully resolialized 25 of 37 men who had done prison terms.

Dr. Davis

Tests have penalized millions. The tests presently in use penalize 60 out of every 100 pupils.

His principal concern is with pupils with low intelligence measures, or reading and arithmetic scores averaging Grade 5 after eight years in school; or pupils in low economic groups who do not get beyond the level of Grade 3 or 4 before the legal school-leaving age.

The Rockefeller Foundation has paid for his study. The teachers indicated that poor progress in schools was due to a cultural handicap or poor schools or a foreign background.

He tried out all the old tests and some new tests of his own construction. He found that standardized intelligence tests have an overwhelming proportion of questions favouring the children of higher occupational groups. An analysis of 10 standardized tests (containing 460 problems) showed that not one question was passed higher by pupils in the low income group. On only 21 questions were the pupils from the low income group equal in performance to the pupils from the high income group.

He constructed an individual test which gave no difference in average I.Q. for the two groups. He used problems which all children meet outside of school. e.g. "Ten children were playing a game. There were 4 more boys than girls. How many girls were there?" In the age-range, 6 years to 9 years this question was answered more successfully by the low economic group.

Cases were cited in which pupils in the moron group on a standardized test exceeded the average I.Q. on the Davis Test. One boy with 72 on Kuhlman Anderson got 115 on the Davis Test. The average I.Q. for the superior economic group was 110 and for the low economic group it was 100.

He suggests that schools should spend more time developing reasoning powers and insight.

Note - Dr. Davis is coloured and appears to stress the plight of his race.

Section 13 - Special Education In Rural Areas

Serving The Mentally Deficient Child In A Consolidated District
Miss Myrtle E. Miller, Krug School of Special Education,
St. Joseph , Missouri.

There are 282 pupils in a school with 23 employees if you include the janitors and the women who prepare the noon lunch. The school has the cooperation of all service organizations. The enrolment includes the mentally deficient children in St. Joseph and those from outside towns. Some children come from cities 200 miles away.

Slides were shown. One case was quoted of a frustrated girl who was refused graduation on the eve of the ceremony and who was readjusted in the printing shop.

The County Programme For The Speech Defective
Miss Patricia Kelly, State Department, Des Moines, Iowa.

In Iowa many of the speech defectives attend the one-roomed and two-roomed schools. The state department of education provides three services as follows:
(1) Survey Service - in which the pupils are located and their teachers advised what may be done;
(2) Consultant Service - the state consultant makes the original examination and revisits the child each semester;
(3) Speech Centre - there are 6 full time centres and 2 part time centres. The state employs a therapist who is an itinerant speech teacher. A fee of $40. is charged for each 9 week period in which a child gets one lesson per week. This expenditure is then reported for regular grants. This scheme seems to suit the Iowa conditions.

Diagnostic Techniques In Special Education
Dr. Charles R. Strother - University of Washington

There are three categories into which deviants may be classified:
(1) Mentally Defective
(2) Brain Injured
(3) Emotionally Maladjusted.

We have quantified many of our measures but it is still a very rough approximation when we can say that a particular child is above or below some fixed point on a scale. There are evils arising out of fixed cut-off point.

Diagnostic techniques should provide a basis for planning and should not result in mere quantification.

We know very well that the I.Q. does change and because of this we should provide for a trial period in a real situation (either play or school) to permit observation of the child's responses.

The trend to-day is to discover how a deaf pupil is like other deaf pupils, or a blind pupil is like other blind pupils, etc. That is more important than finding how he is unlike the so-called normal pupil. There are trends (1) toward the use of a battery of tests; (2) toward the development of norms for each type of handicap; and (3) towards the recognition of non-intellectual factors which affect behaviour.

Wednesday March 22

Demonstration:

School to Home Telephone Service for Homebound Orthopedically Handicapped. This service was demonstrated by a handicapped girl and her class in one of Chicago's schools - A panel discussion.

Social Adjustment of the Orthopedically Handicapped

Mr. Tracht, Psychologist, Cerebral Palsy Clinic, Mercy Hospital, Chicago. Mr. Tracht, himself a cerebral palsy victim spoke of the difficulty that c.p.'s have in trying to have any social contacts. He told of the Young Adult Spastic Club of Chicago of which he is the president and of the great benefits it has brought to sufferers in the Chicago area. It provides a social training ground within the group.

Miss Anna Zuck, Spalding Alumni Association spoke of a summer camp for adult physically handicapped.

Music Therapy for the Orthopedically Handicapped

Mrs. Gilliland, Director of Music Therapy, Chicago Musical College. The speaker told of the values of music especially instrumental music in providing emotional release, social contacts, mental discipline, etc. She showed how different instruments could be used in physiotherapy treatments.

Banquet Speaker - Dr. Margaret Mead - Anthropoligist

Dr. Mead has observed many types of civilization.

(i) where physical perfection is the one requirement for acceptance by the tribe, deafness and blindness do not bar one from society as much as the loss of a finger nail or a scarring disfigurement;

(ii) where there are taboos and customs based on names of relatives and things, the people are always dodging away from those things. This dodging and avoiding becomes a natural part of their lives. The deaf find it particularly hard to acquire or to understand this social behaviour;

(iii) certain Indian customs were pretty rough on young boys. When a boy was unable to stand the tests for a warrior, he was dressed as a girl and did women's work.

Dr. Mead showed how the study of anthropology helped people to understand present conditions because the study of social conditions in primitive societies aids in the recognition of causes and effects in modern societies.

School Visitation - The following schools were visited:

Montefiore School - for social adjustment

Christopher School For Crippled Children - an elementary school where the shop teachers do occupational therapy.

Spalding High & Elementary School For Crippled Children - has divisions for crippled deaf and visually handicapped.

Parker Elementary School - has division for deaf pupils.

Parker High School - has divisions for deaf and visually handicapped.

GRADE 9 COURSES FOR SLOW LEARNERS

C. E. Stothers

The removal of the High School Entrance Examination wipes out an academic barrier to the admission of pupils whose achievement by subjects does not average out at the Grade 9 level. Under this changed condition students will undoubtedly present themselves for secondary school instruction and will exhibit either a wider range of ability levels which has previously excluded them or a special subject disability which may set as a barrier to their successful instruction at the Grade 9 level in large classes.

By special permission, one vocational school, one combined collegiate and vocational school, and one high school in Ontario have experimented with special classes for slow learners during an eight-year period. Pupils who have failed on the public school graduation tests and others who have been retarded as much as four years in reading and language have been admitted to these special classes. The problems created by their inclusion in their social group have been met in several ways. A sufficient study has been made to indicate that the secondary school, which provides for the education of the slow-learning student in the following ways has the greatest chance of success:

(1) employment of a competent teacher who is experienced in and sensitive to the needs of the slow learner to teach most of the academic work of this group;

(2) organization of a programme of studies which allows each individual to start at his achievement levels and proceed at his individual rate in each subject;.

(3) provision for teaching materials for all the levels represented in the class in reading, spelling, mathematics and language;

(4) attachment of groups of special class pupils to the regular Grade 9 classes for Shopwork and Physical and Health Education;

(5) permission for these pupils to take instruction in typing;

(6) drastic reduction of the number of teachers who instruct the students in the special class (adjusting to five teachers seems to be the maximum capacity of these students);

(7) insurance of the cooperation of all teachers who have instructional or disciplinary duties with these pupils.

Under the conditions set forth above, adolescent slow-learners have remained in school an additional two years and have shown an ability to adjust themselves socially and emotionally. This appears to be the result of association with their peers in an educational atmosphere which stresses their successes and highest abilities instead of their failures and incapacities. The same pupils held over a period of several years in Grades 6, 7 and 8 tend to become boorish, truculent, non-responsive and bullying in their habits, with a tendency to seek advice from the worst sources.

The extension of Auxillary Education facilites into secondary schools was delayed by World War II. The first experiments in two different schools in widely separated school districts consisted of

selecting courses from the options available to Grade 9 students. This programme failed because some students had an insufficient vocabulary or were frustrated in the mathematics and reading requirements. Probably a more important reason for their failure was their inability to adjust to more than two or three teachers per diem. When this special disability was recognized and the number of teachers was reduced, the percentage of students remaining after reaching the school leaving age was sharply increased.

The slow-learner, when admitted to a course consisting of the regular Grade 9 subjects, is on unfamiliar ground where he is unable to respond satisfactorily to the teacher's questions. It was found that when instruction was given at or near his level in the same subjects, his responses were increased to the point where his readiness to answer was equal or superior to that of students in the so-called "normal" classes.

Experience in the education of the slow-learner, or even the average or superior learner, with poor achievement in one subject, showed the need for individual teaching which is impossible under class instructional conditions. Individual needs of students were met by breaking the class into small teaching groups of not more than five students. Small frustrating difficulties which block progress in spelling, language, mathematics and reading were remedied by individual or small group teaching procedures. Necessary maintenance work was carried on under the same type of class organization.

Experience shows that the teacher in charge of the academic work of this class must undertake to provide individual educational and vocational guidance. This means that the teacher must be familiar with both individual and group tests and their interpretation. He must assess abilities informally for the first two weeks of school before administering group achievement and intelligence tests. Later individual tests should be made of selected pupils and some careful case studies collected. Instruction should be gauged very closely to abilities, even if the grade level has to be designated as low, middle or high.

Details of the provisions found most successful are given below:

Qualifications of Teacher

(1) High School Assistant's Certificate, Type A or B or Per. First Class
(2) Intermediate Specialist's Certificate In Auxiliary Education.

Time Table

In the high school class, the time table provided for the class to be taught as a unit for 18 periods and as an incomplete unit for 27 periods. This effect stemmed from the need for attaching groups to the other Grade 9 classes for Shopwork and Physical and Health Education. This arrangement was most effective in holding the students beyond the legal school-leaving age.

In a vocational school, two specially trained and

experienced teachers taught the academic work of over 80 students on a time table providing shopwork for half the school day.

Test Materials

Individual Tests-The Canadian Intelligence Examination
The Terman-Merrill Intelligence Examination
The Ontario School Ability Examination
Tests of Manual Dexterity.

Group Tests-California Intelligence Test.
Dominion Group Test In Fundamental Operations of Arithmetic
Gates Reading Survey, Grade 3-10
California Test of Personality
Monroe-Sherman Group Diagnostic Tests
Detroit Mechanical Aptitudes Test.

Books Suggested

10 copies-Winston Dictionary For Canadian Schools
or 10 copies-Thorndike Junior Dictionary-Gage
10 copies-Reading With Understanding-Clarke Irwin
10 copies-Reading Improvement Skill Text-Book II-Moyer
8 copies-Treasure Island (New Method Series)-Longmans
8 copies-Gorilla Hunters (New Method Series)-Longmans
8 copies-Monte Cristo (New Method Series)-Longmans
8 copies-Lorna Doone (New Method Series)-Longmans
8 copies-Moonfleet (New Method Series)-Longmans
10 copies-When I Go To Work -Ginn (combines arithmetic and vocational information)
10 copies-Arithmetic For High Schools-Nelson
10 copies-Useful Mathematics Workbook-Potter-Ginn and Company
5 copies-New Progress Arithmetic Book, Series E-Macmillan
1 copy-Outdoor Life Encyclopedia-McLeod
1 set-The Seasons Pass Series-Dent
1 set-What To Make-General Publishing Co.
6 copies-Days and Deeds-Gage
6 copies-People and Progress-Gage
6 copies-Paths and Pathfinders-Gage
6 copies-Wonders and Workers-Gage
1 set-Little Wonder Library-Moyer
6 copies-Reading For Meaning-Grade 6-Longmans
6 copies-Reading For Meaning-Grade 7-Longmans
6 copies-Reading For Meaning-Grade 8-Longmans
6 copies-Reading For Meaning-Grade 9-Longmans
6 copies-Beckoning Trails-Macmillan
6 copies-Life and Adventure-Macmillan
6 copies-Gates Peardon Practice Exercises in Reading-Book III-A B C
(each) Book IV-A B C D
Book V-A B C D

Bureau of Publications, Columbia University.

1 copy each-Everyreader Series-Longmans
Robinson Crusoe

Cases of Sherlock Holmes
Tale of Two Cities
Story of Moby Dick
Three Musketeers
Gulliver In Lilliput

Copies of Ginn Spelling Workbook or The Pupil's Own Vocabulary Speller should be provided for individual levels of instruction.

Course of Study

Language

(a) Oral-
(1) Development of sentence sense.
(2) Development toward more fluent speech (oral paragraphs
(3) Courteous forms for personal communication.
(4) Discussing and planning.
(5) Questions and answers.
(6) Story telling and reporting.
(7) Dramatization.
(8) Using the telephone.
(9) Interviews.

(b) Written-
(1) Vocabulary for written communication (spelling).
(2) Labels, titles and signs.
(3) Social letters.
(4) Business letters.
(5) Announcements, notices and advertisements.
(6) Reports, reviews and summaries.
(7) News stories.
(8) Memoranda (rules, receipes, records, etc.)
(9) Blank forms (personal data on questionnaires, etc.)

Handwriting-Instruction continued with stress on neatness and legibilit

Spelling-Exercises to be provided on levels at which the pupils can be successful. The class will be organized into two or more groups. Where necessary the simultaneous use of visual, auditory, Kinaesthetic and tactile senses should be used.

Reading-Reading materials should be fitted to each individual's capacities. Where it is necessary, Grade 9 text materials should be re-written to fit a student's reading abilities. Changes in reading abilities must be paced with suitable changes in books. Stress should be given to those reading skills which will be most useful to the student later in his adult life. Reading groups will be organized where possible using the books in the class library. Specific training in each technique in the use of the dictionary should be given.

Composition-Blackboard and oral exercises must be devised for remedial work. The newspaper should provide data for answering advertisements and writing stories. If a Junior High School English Course for Grades 9 and 10 is not used in the regular classes, it will be a satisfactory text for this class.

Mathematics-(chiefly arithmetic)-The aims of the teacher will be to train a future citizen in:

(1) independence in handling ordinary cash transactions;
(2) ability to recognize the mathematical elements in a situation as well as to choose and use the appropriate tool skills to solve the problems;
(3) recognition of and ability to interpret commercial sales terms;
(4) ability to budget both time and money;
and (5) facility in the use of public services and public utilities.

In this subject, it will be necessary to organize the class into small groups for instruction at various grade or mid-grade levels. Work materials from the class library should be available for mathematical instruction.

Physical & Health Education

In this subject, the special student should have the same text as the regular Grade 9 classes. The teacher may have to write down certain sections or chapters of the text for improved comprehension.

Groups from the special Grade 9 will be attached to regular classes for gymnasium field and track work.

Social Studies

(1) Geography-(a) Location of places on the map of Canada.
(b) The main industries.
(c) Use World Wide Geography as a guide for an enterprise.

(2) History-(a) Trace the economic and social development of the local area from its earliest settlement;
(b) Select other areas for similar treatment.

(3) Current Events-Use newspaper and magazine materials, selected by the teacher and the students.

(4) Civics-Topics to be selected by the teacher and principal.

Science-The Science Course should be designed more for the stimulation of interest than for the acquisition of facts. Where a general topic has been chosen instead of the usual high school course, the results in the acquisition of knowledge and the quality of science notebooks has been eminently satisfying to the teacher, the student and the administrators.

Example-Building A House

A-Preliminary Discussions:

1. Owning vs Renting.
2. Buying vs Building.
3. Points to watch in Building or Buying.
4. The Lot and its Landscaping.

B-Gardens

1. The study of annuals, biennials and perennials.
2. Common weeds and how to kill them.
3. The annual and perennial flowers.
4. Preparation of plants for winter.
5. Storage of vegetables and fruit.

C-The Heating System
1. Use of air (oxygen) in burning.
2. Production of oxygen and oxides.
3. Comparison of burning and rusting.
4. The furnace-firing and care.
5. Hot air, hot water and steam heating systems.
6. Fuels and insulation.

D-The Water Supply.
E-Electrical Appliances and Power.
F-Upkeep of Home.
G-The Garden In Spring.

Note-This science project was productive of questions from the pupils. Some of the topics which were thus intruded into the course were: stocks and bonds, jet propulsion, solar heating, earth heat, glaciation and ice ages, shore lines, pre-historic beasts, water organisms, latent heat of fusion, reforestation, forest fires, water service in skyscrapers, bulb forcing, etc.

Typing-The regular course.

Shopwork-The regular course in Drafting, Woodwork, Machine Shop and Sheet Metal Work.

Household Economics-The regular course.

Key No. 8M - Newcomers.

Advisement For

Name	Age	Grade	School

Examiner's Remarks

Key No. 8M - Newcomers.

Advisement For

Name	Age	Grade	School

Examiner's Remarks

1. The Displaced Person learns English by using the language at such times as his environment demands it. In the elementary school, all the usual methods are applicable, but these methods will work much better if the pupil has the minimum necessary supply of English words. One well-tried method of developing a basic English Vocabulary is the Direct Method.

2. The Direct Method involves:-
(a) Hearing the words: The ear is the principal organ by which we receive language. The spoken language is usually acquired by children long before they have any knowledge of reading and writing. It appears to be necessary for children and adults to acquire the ability to recognize the sound and the meaning.
(b) Speaking Words and Sentences: In the very first lesson, the child will first listen to the sounds of new words associated with actions and objects and will imitate them all. He will speak some English words without any previous knowledge of the language.
(c) One language: The teacher in using this method does not require any acquaintance with the language of the student. It is deemed preferable that he should not know it because he might waste time in translation.
(d) Pronunciation: The teaching of pronunciation will often require exaggerated motions of the lips and tongue so as to make clear to the pupil the different sounds. Time should be taken by the teacher to give personal coaching to each student sufficient to enable him to produce the sounds accurately. Teachers are advised to have a large mirror located conveniently in the classroom to permit the pupil to check his imitation of the teacher's pronunciation.
(e) A theme or topic: Every good lesson in the Direct Method is in theme form. The teacher selects a topic involving some ordinary task or action. Sentences are made up in which appropriate words are used. The teacher performs the actions described in each sentence, speaks the sentence, repeats, and calls on the pupils to repeat the sentence after him. After developing the theme orally (sentence by sentence), the teacher goes back to the first sentence and writes it on the blackboard. The pupils read the sentence and give special attention to the difficult words. The last step is the copying of the theme by the students into the notebooks.

3. The teacher should gather an abundant supply of supplementary materials. The following suggestions have been found helpful.
(a) The calendar - The pupils already know the symbols, but not the English names. The same is true of the names of the days of the week.
(b) Use a portion of the blackboard for teaching:
    (i) the names of the pupils;
    (ii) simple directions and notices, such as "John, shut the door", "Mary, bring me the books".
    (iii) Weather reports.
    (iv) Illustrated jokes.

(c) Sunday School Papers: This gives excellent material for cut stories. Cut the story by paragraphs, numbering each, and paste on cardboard. Give a paragraph to each pupil, and then after a study period, call for the reading.
(d) Posters - Familiar posters make excellent reading lessons, such as:

Cross Crossings Cautiously
Join The Red Cross

(e) Public Signs:

Auditorium
Court House
Entrance
Exit
Elevator
Fire Escape
Post Office
General Delivery
Money Order
Parcel Post
Post No Bills
Fresh Paint
Notary Public
Stamps
Poison
Warning
Danger
For Sale
For Rent

To Let
Stop
Stop - Go
Detour
Go Slow
Be Careful
Stop-Look-Listen
Railroad Crossing
Traveller's Aid
No Smoking
No Admittance
Information
Welcome

(f) Flash Cards - Teachers should bring to the class, a number of flash cards for each lesson. Drill should be given on words, phrases, prefixes, suffixes and roots when the opportunity presents itself.

(g) Advertising Materials: The newspaper provides advertisements of department, grocery and chain stores. These advertisements should be used to illustrate lessons for displaced persons.

(h) Assignments: Assign each lesson as definitely as possible. Urge the pupils to review the lesson at home by reading it several times silently followed by oral reading.

(i) Identification Sentences:
(i) My name is _____.
(ii) I live at _____.
(iii) I came from _____.
(iv) I came to Canada in _____(year).
(v) I have _____(brothers and sisters).
(vi) I am _____ years old.

4. A List of Words which should be taught. (This listing does not mean that they should be taught separately as single words).

Animals
horse
cow
pig
chicken
sheep
cat
dog
cattle

Birds
robin
sparrow
hawk
duck
crow
wren
bluebird
owl

Body
head
hands
mouth
teeth
legs
feet
eyes
stomach
nose
ears
arms
throat
hair
fingers
toes

Garden
shovel
rake
spade
flowers
weeds
vegetables

Days
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday

Food
bread
meat
fish
eggs
milk
apple
corn
beans
peas
butter
coffee
sugar
tea
ice
flour
lard
pork
potatoes
tomatoes

Furniture
chair
table
lamp
stove
sofa
bureau
bookcase
desk
pictures

Health
well
sick
strong
weak
pain
disease
ache

House
door
window
room
porch
verandah
steps
stairs
hall
kitchen
bedroom
living room

Human Beings
man
woman
wife
husband
Mr.
Mrs.
Dr.
gentleman
lady
boy
girl
child
baby
father
mother
brother
sister
people
friend

Locations
above
up
there
here
under
below
down
ground
away
front
back

Money
cent
penny
nickel
quarter
dollar
dime

Months
January
February
March
April
May
June
July
August
September
October
November
December

Numbers
one
two
three
four
five
six
seven
eight
nine
ten
eleven
twelve
thirteen
fourteen
fifteen
sixteen
seventeen
eighteen
nineteen
twenty
thirty
forty
fifty
sixty
seventy
eighty
ninety
one hundred

Clothing
cap
hat
dress
shoe
stockings
vest
collar
shirt
trousers
waist
skirt

Colours
blue
red
white
black
green
yellow
brown

Pronouns
I
he, she
we
you
they
me
him
us
her
them
our
your
mine
his
hers
ours

Quantity
many
much
more
less
half
piece
pint
pound
some
any
both
all
part
little
big

Religion
God
Lord
Christ
Jesus
Church
Temple
worship
prayer
chapel
Spirit
Heaven
Hell
faith
clergyman

Time
hour
week
month
now
then
old
again
to-night
to-day
early
late
night
last

Verbs
walk
ride
run
work
play
speak
write
clean
bring
go
sit
get
take
cut
break
sew
do
put
come
carry
lift
see
rise
wash
iron
buy
wear
call
earn
save
learn
find
breathe
hold
say
vote
obey
sell
give
read
keep
look
make
ask
fall

Prepositions
to
with
for
out
up
over
under
through
down
in
by

Adverbs & Adjectives
hard
soft
pretty
ugly
strong
weak
brave

Weather
snow
storm
blow
heat
sun
hot
cold
warm
wind
rain
winter
summer
spring
autumn
fall

5. The detailed blackboard stories of several lessons in the Direct Method are given below. In the first stages, the teacher makes them up. Later, the pupils may help as much as they can.

(i) Open The Door -

I sit. (use pupil's name)
I stand.
I walk to the door.
I open the door.

(ii) I Go Out -

I stand up.
I get my hat.
I get my coat.
I put on my hat.
I put on my coat.
I go out.

(iii) Give Out Paper and Pencils -

I walk to the table.
I get the paper.
I give paper to each pupil.
I get the pencils.
I give a pencil to each pupil.
I go to my chair.

(iv) I Get A Drink -

Water is in the pitcher.
I take the pitcher.
I take the glass.
I pour water into the glass.
I set the pitcher on the table.
I drink the water.
I set the glass on the table.

(v) I Light The Fire -

I go to the stove.
I take off the covers.
I put paper on the stove.
I put wood on the paper.
I open the draft.
I scratch a match.
I light the paper.
I put the covers on the stove.

(vi) I Buy Food -

I go to the store.
I buy a box of biscuits.
I buy three apples.
I take them to the clerk.
I pay him.
I go out of the store.

(vii) I Sweep The Floor -

I take the broom.
I sweep the floor.
I move the chairs.
I sweep out the corners.
I sweep the dust into the middle of the floor.
I take it up with a dust pan.
The floor is clean.

(viii) Other Titles

(a) I Take a Book
(b) I Get Up
(c) I Eat My Breakfast
(d) At Dinner
(e) I Write A Letter
(f) I Count My Money
(g) I Tell Time By The Clock
(h) Mailing a Letter
(i) The Doctor's Visit
(j) Fresh Air
(k) Return To School
(l) Note To Teacher
(m) My Garden
(n) Buying Dishes
(o) Buying a Suit
(p) Renting a House
(q) An Evening At Home
(r) A Baseball Game
(s) The Railroad Train

(ix) Note - By this time, the second and third person pronouns will have been introduced. This lesson is given in some detail to illustrate that change.

(a) The Hospital -

My brother broke his leg.
The doctor came to see him.
He set the bone in place.
My brother needed good care.
He went to the hospital.
I went with him.
At the hospital, they put him on a stretcher.
They put him to bed.
The doctor put his leg in bandages.
The nurses were kind to him.
He had plenty of good food.
He got well quickly.
He was sorry to leave the hospital.

(b) <u>The Police</u> - I went out for a walk last week.
When I came home, I found my door open.
I went into the house.
My money was gone.
I told a policeman.
He said, "We will find the man who took your money".
Yesterday the policeman came to my house.
He said, "I have your money".
I said, "Where did you get it?"
He said, "We caught the man who stole it".

(c) <u>Other Titles</u>

1. The Library
2. Buying Clothing
3. Using Milk
4. Reading The Newspaper
5. A Visit from My Uncle
6. Dominion Day
7. Keeping The House Clean
8. At The Movies
9. Keeping Healthy
10. A School Entertainment
11. Planning A Trip
12. Telephoning The Doctor
13. Introducing Two People
14. Thanksgiving Day
15. Writing a Letter
16. Buying Stamps
17. Depositing Money At The Bank
18. The Good Citizen
19. Furnishing a House
20. Food
21. Becoming A Citizen
22. Labour Day
23. Christmas Day
24. St. Valentine's Day
25. St. Patrick's Day
26. Remembrance Day

6. Books For Displaced Persons

The following list of books is provided for adult Displaced Persons who attend Night School Classes. These are supplied free to adults through the Community Programmes Branch of the Ontario Department of Education, but are not supplied to children of school age. The addresses are given to permit teachers to order these books since the parents might get some help from their children. The starred books should be useful to the elementary school pupil.

1. Handbook For The Newcomer To Ontario.
   Community Programmes, Ontario Department of Education, 206 Huron St., Toronto.

2. How To Become A Canadian Citizen.
   Canadian Citizenship Branch, Department of The Secretary of State, Ottawa.

3. Handbook For New Canadians.
   A Primer For Citizenship. The Community Welfare Council of Ontario, 24 Bloor Street West, Toronto 5.

* 4. The Pocket Book of Basic English.
   Pocket Books Inc., Rockefeller Centre, New York. (A Picture Dictionary).

* 5. Teacher's Guide For Learning The English Language.
   Houghton Mifflin Co., Boston. (Try Renouf & Co., 1455 McGill College Ave., Montreal, Canadian agents for Houghton Mifflin Co.)

* 6. (a) Learning The English Language - Book I
   (b) - Book II
   (c) - Book III
   Houghton Mifflin Co., Boston.

The following books are titles which are not on the list of books issued by Community Programmes.

* 7. McLean and Watson - English For Newcomers.
   Toronto, Nelson, 1931. (Lessons using the Direct Method originally used in Night Schools for Adults).

Other books useful to the teacher and pupil are as follows:-

8. _____A Picture Dictionary - Toronto, McLeod & Co.
9. Reade - Improve Your Accent - Toronto, MacMillan & Co.
10. Clendenning - Mastering English - Toronto, MacMillan & Co.
11. Gates et al - Pupils' Own Vocabulary Speller (Grade 4 and up) - Toronto, MacMillan.

Key No. 8L - Remedial Reading

Advisement for

Name	Age	Grade	School

Note - This is a compilation of suggestions for re-educating a pupil whose achievement in reading is much below what his ability rating would lead his teacher to expect. The whole advisement should be read by the teacher. Paragraphs and books are marked if the examiner wishes to convey to the teacher some special advice for this pupil. Other important directions in this pupil's case are mentioned under "Examiner's Remarks".

Examiner's Remarks

It is suggested that this pupil begin his remedial reading programme with the Grade Book.

Advisement for

Name	Age	Grade	School

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Examiner's Remarks

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I. General Notes

1. Remedial teaching of any kind is concerned with Prevention, Correction of and Compensation for bad habits, errors, lacks and all handicaps. This advisement deals with Corrective and Compensatory types of Remedial Reading.

2. A remedial Reading programme is recommended for a pupil whose average yearly progress is more than 4/5 of a year's work, but whose progress in reading is not up to this average. These suggestions are not made for the pupil whose general ability allows him to progress at a rate less than 4/5 of a year's work in the usual school year.

3. The teacher who undertakes a remedial reading programme must accept the problems of diagnosis, re-orientation to reading, re-training and readjustment of the pupil. To assist this teacher, the examiner has begun the diagnosis and has made certain recommendations for beginning the remedial programme. It is the teacher's function to continue the diagnosis and educational treatment of this child.

4. The general plan of instruction in any remedial programme can be stated as follows:-
(a) Immediate success in some line should be secured for the pupil to compensate for his previous frustration and failure;
(b) By formal and informal methods and tests, data must be secured on the child's intellectual, social, physiological, emotional and achievement levels;
(c) Instruction in a remedial reading programme should begin below the achievement levels using methods and reading materials which have not been associated with the child's failure in reading;
(d) Instruction should be continued at the child's individual rate to his capacity.

5. Symptoms of difficulty in reading should be noted by the teacher. Some of the more noticeable symptoms are noted below:-
(a) Bad Reading Habits - (i) Lip movements in silent reading; (ii) Head movements in oral or silent reading; (iii) Vocalization in silent reading; and (iv) Finger pointing.
(b) Reading Errors in Oral Reading - (i) Word and letter substitutions; (ii) Omissions of letters, words or lines; (iii) Repetition of words or phrases; (iv) Insertions of words or syllables; (v) Frustration for 5 seconds in recognizing a word.
(c) Reading Lacks or Disabilities - (i) Inability to analyze or synthesize sounds; (ii) Inability to syllabicate; (iii) Inability to grasp the meaning of words; (iv) Inability to remember or select details; (v) Inability to grasp the general import; (vi) Inability to give the meaning of words; (vii) Inability to use words; (viii) Disability in getting the meaning of a sentence; (ix) Disability in grasping the general sense of a paragraph; (x) Difficulties with abbreviations.
(d) Reading Handicaps - (i) Hold-over habits from the beginning grades; (ii) Speech defects; (iii) Hearing defects; (iv) Maturation as readiness or slow vocabulary development; (v) Visual defects; (vi) Cerebral Palsy; (vii) Emotional conditions or effects; (viii) Unsuitable reading materials; (ix) The use of a foreign language in the home; (x) Lack of knowledge of the alphabet; (xi) Poor methods of using the dictionary.

6. The symptoms should be recorded in detail. The teacher should write down examples of each symptom from the child's daily lessons. Another method of recording symptoms is to give standardized individual tests in oral reading and individual or group tests in silent reading. (The examiner who has prepared this advisement has administered some standardized tests in order to find a starting point at which to begin remedial instruction. The teacher should continue this testing as a check on the success of her remedial teaching). Informal tests can, if used to advantage, reveal more of the pupils' difficulties and needs than can standardized tests.

7. Before commencing a programme of remedial instruction, the teacher should relate the child's errors, bad habits, lacks and disabilities to their origin. It is most honest if it is assumed that the errors, bad habits, lacks and disabilities have resulted from the child's learning. This does not mean that the previous teachers intended to teach him these errors, bad habits, etc.

Reasons for the development of the reading symptoms should be sought in:-
(i) The teaching methods to which he has been subjected;
(ii) The teaching and learning materials used such as,- readers, pictures, charts, diagrams, etc. (The teacher may find causes in the kinds of books used, the lack of books, and other materials and devices);
(iii) The home background of the child;
(iv) The child's social development as observed in the playground or in the community;
(v) The child's physiological development or the presence of handicaps of sight, hearing and speech;
(vi) The child's mental and emotional maturity.

8. In relating the symptoms of poor reading, the teacher is preparing a working hypothesis on which to base a remedial programme. He is finding relationships like the following examples:-
(i) Poor word recognition is likely due to poor eyesight which is shown by rubbing the eyes, excessive blinking or holding the book too close to the eyes, etc.
(ii) Slow phonetic analysis is connected with the teaching because the pupil found that sounding out the word pleased the teacher who neglected to give practice in the synthesis of sounds into words.
(iii) Poor performance in reading probably comes out of a home background which did not provide a sufficient vocabulary at the time of the child's entrance to school. This handicap still holds.
(iv) The omission of endings of words such as "s, t and d" may be due to inattention, hearing or mental maturity.
(v) Word calling may be due to the use of reading materials which were too difficult for the child together with the lack of provision for practice in grouping words.

9. This hypothesis should be the basis of the teacher's plan for remedial work. New books and new blackboard stories should be used. The teacher should try to influence the pupil into giving these methods and materials a fair trial.

If the diagnosis is wrong, the hypothesis derived from it will not provide the clues needed for deciding on methods and materials. In this case, the teacher should review the evidence and try out another hypothesis. The teacher should not always expect to do successful remedial work on the original hypothesis. This is an individual matter with children. Teachers tend to generalize and group pupils that should not be grouped.

10. If the materials chosen for reading practice are at the child's level of achievement and performance, he will be able to read them. He may read them fluently if the habit of word saying has not been too strongly developed.

The reading materials selected must be at the child's social level. It is unwise to give a Pre-Primer which is suitable for 6-year-olds to a 9-year-old boy or girl, but he may use a primer providing he doesn't know it is a primer or Book I.

Stories in which the child makes no more than five (5) errors in each hundred words are sufficiently difficult.

11. While children will make progress at their individual rates, if the books or stories are suitable this progress can be hastened by applying suitable methods along with suitable materials. Some suggestions in methods are as follows:-
(a) Where single-letter phonics is used excessively, give training in synthesizing sounds;
(b) For calling single words, give training in grouping words and in word liaison;
(c) Where final letters of words are omitted, give ear-training;
(d) Where words are reversed, train the child to go from left to right and to recognize groups of words. In severe cases, try the Kinaesthetic Method.
(e) Where the child recognizes the form without the meaning, the Non-Oral Method may be tried;
(f) Where the child cannot move his eyes accurately from the end of one line to the beginning of another, try a piece of cardboard under the line as a guide;
(g) Where the pupil is a non-reader, yet should be in the intermediate grades, try blackboard stories or chart stories on his preferred subjects.

I. Methods of Teaching Reading

It is assumed that you will use as your main method that one which brings you the best results because teaching is a special art which depends on personal abilities, preferences and characteristics. In remedial reading, you must be a master of all methods using them for definite purposes for the necessary period of time. A summary of methods in reading follows:-

(1) Combination Method - two or more of the methods are used appropriately.

(2) Phonic Method - Word analysis and synthesis are the main techniques and give the method its name.

This method provides the pupil with a key by which he can unlock words. Inappropriately used, it is a spelling method. Children who have difficulty in discrimination of sounds may have serious difficulty, particularly if analysis of words is practised more than synthesis of sounds. Key words are used to introduce the sounds. Due to English spelling, the word list must be developed carefully. Sight words must be taught separately.

(3) The Story Method - The pupil memorizes a story first. Later he begins to recognize words by their location and repetition in the story. Three-year-old children do this in their Nursery Rhyme Books. The classes for the deaf use as a variant of this, a daily story made up of the incidents told by the children themselves. The vocabulary of the stories should parallel the vocabularies of the children.
Reference - Schonell - Backwardness In the Basic Subjects.

(4) The Non-Oral Method - Directions to do things are printed on strips of cardboard. These strips are placed in a chart-holder. The child carries out the directions to show that he knows what it means. Read-and-Do exercises are part of the Non-Oral Method. An oral lesson precedes a non-oral period.

(5) The Word or Sentence Method - Abstract words are taught as sight words. Picturable words are shown by pictures and demonstrable words by demonstrations. The pictures take up a great deal of space on the classroom walls and are a pupil's first dictionary.

(6) The Kinaesthetic Method - This is a variation of the Montessori Tracing Method. The pupil is led to tell a little story. When the story has been phrased he is asked to write it out. He is allowed to put in a stroke for each word he cannot write. The words he cannot write or spell correctly are written as large as possible on a piece of drawing paper 4"x13" in the same style as he uses (print writing or cursive writing).
Stage I - The pupil is given one piece of paper at a time. He is told the word. Then he is asked to say the word and trace it. The value comes from seeing, hearing, saying and tracing the word - a four-way approach through the sense organs at approximately the same time. He repeats his seeing, saying, hearing and tracing until he thinks he can write it without looking at a model. If he fails to write it without looking, he continues tracing. If he is successful another word is given.

When all the words have been written without looking at a copy, he is asked to read the story. He may be successful in writing the story without copy.
Stage II - This is reached when the pupil can write a word when he has seen, heard and said it. Tracing can be eliminated when this stage is reached after from 100 to 200 words have been learned.
Stage III - The pupil writes the word after he has seen the word and the teacher has told him what it is.
Stage IV - The pupil writes the word after he has looked at it.

Reference - Fernald - Remedial Techniques In Basic School Subjects.

(7) The A.B.C. Method - This is a spelling method where the pupil is taught to spell and say each word as "See - Ay - Tee," cat. When auditory discrimination is weak, this method may be used to increase the number of clues or sound impressions for any one word. This method is very old and is rarely used now in teaching the regular grades.

III. Books For Remedial Reading - Selections for this pupil are marked in pencil in the order they may be taken. If the readers marked are in use in the school, they should not be used for remedial reading. Books from another series should be chosen.

Curriculum Foundation Series - Gage
With Teacher's Manuals and Think and Do Books

I. Fun With Dick and Jane
Our New Friends
II. Friends and Neighbours
More Friends and Neighbours
III. Streets and Roads
More Streets and Roads
IV. Times and Places
V. Days and Deeds
VI. People and Progress
VII. Tales and Travel
VIII. Wonders and Workers

Reading For Interest Series - Copp Clark
With Teacher's Manuals and Pupils' Workbooks

I. A Home For Sandy
Rain amd Shine
II. Something Different
III. Fun and Frolic
IV. Luck and Pluck

Ginn Basic Reading Series - Ginn and Co.
With Teacher's Manuals and Pupils' Workbooks

I. On Cherry Street
II. We Are Neighbours
Around The Corner
III. Finding New Neighbours
Friends Far and Near

The Aeroplane Series - MacMillan
I. Straight Up
II. Straight Down
III. Planes For Bob and Andy
IV. Aeroplanes At Work

The New Work Play Series - MacMillan
With Teacher's Manuals and Pupils' Workbooks

P. Jim and Judy
I. Down Our Street
II. We Grow Up
III. Wide Wings
IV. Let's Look Around
V. Let's Travel On
VI. Let's Go Ahead

Today's Work Play Series - MacMillan
With Teacher's Manuals amd Pupils' Workbooks

P. Tags and Twinkle
I. Good Times on Our Street
II. Friends and Workers
III. On Longer Trails

Easy Growth In Reading Series - Winston
With Teacher's Manuals amd Pupils' Workbooks

P. At Play
Fun In Story
I. I Know A Secret
Good Stories
II. Along The Way
The Story Road
III. Faraway Ports
Enchanting Stories
IV. Today and Tomorrow
V. Looking Forward
VI. Moving Ahead

The Core Vocabulary Series - MacMillan
P. The Ranch Book
I. Rusty Wants A Dog
II. Smoky The Crow
III. Planes For Bob and Andy

Learning To Read Series - Gage
With Teacher's Manuals and Pupils' Workbooks

I. Down The Road
II. In New Places
III. From Sea to Sea

Miscellaneous Books

II. Fun At the Playground - MacMillan
II. Skippy - MacMillan
III. Fun In Swimming - MacMillan
III. Our Earth - MacMillan
IV. When Today Began - MacMillan
IV. Using Our Earth - MacMillan
V. Lorna Doone - Gage
Six Great Stories - Gage
Tom Sawyer - Nelson
Uncle Tom's Cabin - Nelson

The Story Book Series - Winston

III-IV. The Story Book of Houses
The Story Book of Cotton
The Story Book of Oil
The Story Book of Rayon

The New Method Readers - Longmans

II. Kalulu, The Hare
II. Robinson Crusoe
III. Gulliver's Travels
The Black Arrow
The Black Tulip
IV. Jungle John
King Solomon's Wives
VII. Ivanhoe

IV. Teaching Remedial Reading

(a) The first step is to find the level at which the child can read fluently and with understanding. This grade level can be found by trying him out using books at various grade levels. If the examiner has indicated a grade level at which to begin, the teacher should check the suggestion by testing the pupil's oral and silent reading performance in books and stories of a similar grade level if the recommended books are not at hand. The pupil should read stories from the first, middle and last sections of a book to secure an indication of whether he can read a low-level, middle-level or high-level book of the grade.

(b) Notes on the pupil's errors should be made for guidance in teaching. The teacher can easily prepare her own check list. These notes should cover the following fields:-

(i) General Observations

Which hand or foot does he prefer? Has he good muscular control? Can he follow directions and observe rules? Does he reach promptly or does he appear puzzled when spoken to? Is he interested in school? Does he talk about his activities? In what things does he show special interest?

The child's interest is active, personal and objective. While some interests are transient; others are permanent. The pupil must be doing things and sharing his interest with the teacher and his classmates.

(ii) Observations Made During A Story Period

What type of story appeals to him? How much of the story can he recall? Does he answer questions (a) by one word? (b) by phrases? or (c) by sentences? Does he express the thought of the story in his own words.

These observations should give a lead for the construction of short blackboard stories which the teacher should use.

(iii) Observation of Reading Symptoms - Paragraph 5 of Section I of General Notes gives a list of symptoms which should be written down in detail. The type of error which shows the greatest frequency should be given immediate attention.

(c) The child's own vocabulary is the one he personally developed and contains the words which interest him. These words should be used in his reading. Blackboard stories or stories printed on strips of paper for use in a chart-holder should be prepared to include the everyday words he uses (the words which may not be included in the remedial reader).

Suggestions for teaching new words follow:-

(i) Teach those words which the child uses in his everyday speech;
(ii) Be careful to teach words which stand out clearly and present no difficulties of configuration; (Do not teach pairs together like "left" and "felt" or "gay" and "joy").
(iii) Do not teach too many words at once; (iv) Give the child time to think about each word; (v) Provide a point of reference for each word.

(d) Remedial instruction may be hampered by inattention or by unwillingness to work. This is most likely a product of the pupil's previous frustration. If it is due to a physical cause such as defective hearing or sight, medical advice and treatment should be sought. If it is due to the pupil's experiences in learning, appropriate psychological measures are required to develop self-confidence, interest and success.

Some pupils refuse to try to read if they are given thick books. This may stem from their experience of two or more years using the same reader. They are usually willing to attempt one page at a time or one blackboard story. When their confidence in their own abilities has been restored, longer stories may be attempted.

Unwillingness to work may be a product of years of having avoided answering because of a fear of being wrong. Such a pupil must be given encouragement.

(e) The remedial instruction up to this point has consisted in finding materials which the pupil can read. If the teacher knows where to find or how to make suitable stories for the pupil as he develops, a fairly efficient remedial reading programme can be maintained.

The programme will be much more efficient if provision is made for a direct attack on the pupil's difficulties. The most frequent cause of failure in reading is inability to recognize words. This results in lack of confidence, inefficient methods of attacking words, poor comprehension and a slow rate.

Some techniques which are useful are:-

(i) Keeping a word list in front of the pupil; (ii) Giving oral practice in recognizing phrases or groups of words before asking for oral reading;
(iii) Writing words in horizontal lines rather than vertical columns; (iv) Giving the pupil practice in synthesizing words which the teacher sounds out by letters or syllables; (v) Using a tachistoscope or wheel for rapid, single or group word recognition.

(f) "It is unlikely that research will ever discover a single method which will be the most efficient one for all pupils and all teachers" - Durrell. Lesson procedure should be somewhat as follows:-

(1) Preparation - an introduction to stimulate the pupil's readiness to do his part in the lesson;

(i) Make use of and supply the necessary background of information. (This may be found in the Teacher's Manuals which accompanies each of the reading series listed in Section III, Books For Remedial Reading.

(ii) Introduce the new words orally. (These are listed at the back of the book.

(2) The teacher should guide the pupil in silent reading to get the main ideas and events. (The habit of giving one page at a time should be avoided).

(3) Questions should be given to check the pupil's ability to infer his knowledge of word meanings and his grasp of the details of the story.

(4) Purposeful re-reading may be needed. This may be oral or silent.

(5) Follow-up activities.

(g) "Silent reading must precede oral reading". The following instructions for silent reading should be read to the pupil often. It may be placed on the blackboard or typed out for reading by the pupils themselves if they are over nine years of age.

1. Force yourself to read a little faster than is comfortable. Don't worry if you miss the exact meaning of a word, phrase or sentence. Read ahead. Get the main idea. That's what counts most.
2. Keep a record of your own speed. Don't read from word to word. Glance at the line and get the idea.
3. Keep your lips and head still. Relax. Take it easy.
4. Don't let your eyes stop on a word or sentence. Keep going.
5. Never go back over a line. Go on.
6. Try glancing down the centre of the page - one glance to a line.
7. Remember you must read some things quickly to get the main idea - book, magazine, newspaper. Other things you must read slowly word by word - telegram, instructions for a job.

(h) Reading matter which is interesting to the pupil and at his reading level can be prepared by re-writing an extract from a book, magazine or newspaper. This should be a paragraph or story of 150 to 200 words with at least five questions to be answered by the pupil. The questions should be planned as follows - one on general significance, one on inference and three on details. This exercise should be given at least once a week.

(i) In the case of a non-reader, the teacher is advised to use the Story Method and the Kinaesthetic Method until such time as a book suitable for Grade II can be read by the pupil.

V. Professional Books Recommended for the use of the Teacher

These books are listed in the Circulars on Reading prepared by the Department of Educational Research, Ontario College of Education, 371 Bloor St. W., Toronto. They are listed giving author, title and publisher.

Betts - Foundations of Reading Instruction - Toronto, W. J. Gage.
Bond and Bond - Teaching The Child To Read - MacMillan.
Cole - The Improvement of Reading - Toronto, Oxford.
Dolch - A Manual For Remedial Reading - Champaign, Illinois, The Garrard Press.
Durrell - Improvement of Basic Reading Abilities - Toronto, W. J. Gage.
Fernald - Remedial Techniques In Basic School Subjects - Toronto, Ryerson.
Gates - The Improvement of Reading - Toronto, MacMillan.
Hildreth & Wright - Helping Children To Read - New York, Bureau of Publications, Columbia University.

Harris - How To Increase Reading Ability - Longmans
Kottmeyer - Handbook for Remedial Reading - St. Louis, Webster.
McAllister - The Primary Teacher's Guide To Speech Correction - Toronto, Clarke Irwin.
McAllister - Steps In Speech Training, Steps 1-5, Teacher's Book - Toronto, Clarke Irwin.
Schonell - Backwardness In The Basic Subjects - Toronto, Clarke Irwin.

VI. Books Recommended For Teaching and Testing

Brueckner - Diagnostic Tests and Remedial Exercises In Reading - Toronto, Winston.
Durrell & Sullivan - Building Word Power - Toronto, Gage.
Gates & Peardon - Practice Exercises In Reading, Books III, IV, V, VI, Types A,B,C and D. New York, Bureau of Publications, Columbia University.
Russell, Karp & Kelly - Reading Aids Through The Grades - New York, Bureau of Publications, Columbia University.
Stone - Eye and Ear Fun - Toronto, Longmans Green.
Wilkinson & Brown - Improving Your Reading - Toronto, Clarke Irwin.

VII. Tests Recommended

The following group tests are listed in case the teacher wishes to know where to get materials with which she can check his remedial teaching or the achievement of other pupils. Tests are available in packages of 25.

The Dominion Tests - The Vocational Guidance Centre, 371 Bloor St. W., Toronto.
See Catalogue for exact description.

Catalogue No.

810 - Dominion Achievement Tests In Silent Reading - Primary, Grade I
Type I - Word Recognition.

811 - Dominion Achievement Tests In Silent Reading, Primary, Grade I
Type II - Phrase & Sentence Reading.

812 - Dominion Achievement Tests In Silent Reading, Primary, Grade I
Type III - Paragraph Reading.

813 - Dominion Achievement Tests In Silent Reading, Primary, Grade I
Type IV - Diagnostic Test In Word Recognition.

814 - Dominion Achievement Tests In Silent Reading - Grades 2 & 3.
Type I - Vocabulary Test.

817 - Dominion Achievement Tests In Silent Reading - Grades 3 & 4.
Type II - Diagnostic Test In Paragraph Reading.

815 - Dominion Achievement Test In Silent Reading - Grade 2.
Type II - Diagnostic Test In Paragraph Reading.

816 - Dominion Achievement Tests In Silent Reading - Grades 4,5 & 6.
Type I - Vocabulary Test.

Gates Basic Reading Tests for Grades 3-8 - Bureau of Publications, Columbia University, New York.

Type A - Forms 1, 2 and 3 - Ability to grasp general significance
Type B - Forms 1, 2 and 3 - Ability to predict outcomes.
Type C - Forms 1, 2 and 3 - Ability to understand specific directions.
Type D - Forms 1, 2 and 3 - Ability to note details.

Gates Reading Survey For Grades 3-10 (Vocabulary, Level of Comprehension, Speed and Accuracy) Forms I & II
Bureau of Publications, Teachers College, Columbia University, New York.

Metropolitan Achievement Tests In Reading - World Book Co., Yonkers-on-Hudson, New York.

Intermediate - For Grades 4,5 and 6 - Forms A, B & C.
Advanced - For Grades 7 & 8 - Forms A, B & C.

Monroe & Sherman - Group Diagnostic Reading Aptitude and Achievement Tests For Grades 3-9 - Nevins Printing Co., Pittsburgh.

Key No. 8H - Direct Learner
Girl or Boy - (7-12)

Advisement For

Name	Age	Grade	School

Note - This is a compilation of suggestions for the education of a pupil whose learning rate is much below average. Paragraphs and titles of books are marked if the examiner wishes to convey some special advice to the teacher. Where the board provides the learning materials suggested, a special grant of $5.00 per pupil per annum may be earned.

Additional suggestions may be written under "Examiner's Remarks".

Examiner's Remarks

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Examiner's Remarks

General Notes

1. This advisement is prepared so as to cover the pupil's requirements in books and materials for a period of one year or more. The specific recommendations as to methods are not to be considered as final because as the pupil readjusts and develops the methods indicated may have to be changed or abandoned. The materials suggested for Craft Work or any other subject should be renewed as often as is necessary.

2. When a pupil has failed hour after hour, day after day, week after week, month after month, term after term and year after year, he usually has an unfavourable attitude to school and to certain academic subjects. He may show a definite emotional reaction or a well-developed defence which is inimical to his future chances of success. His record of failure must be changed and this is usually managed in one or all of the following ways:

(a) by finding his level of ability in reading, arithmetic and language and by selecting books, methods and materials which are suited to these levels and any special conditions;
(b) by having the pupil proceed at his individual rate;
(c) by an examination to discover sight, speech, hearing, muscular coordination and emotional handicaps;
(d) by introducing crafts which are of interest to the pupil and which provide him with tangible evidence of success;
(e) by the use of enterprises or projects in which the work of this pupil can earn legitimate praise;
(f) by social pressure and human engineering (not by the direct application of physical force and too frequent use of commands.);
(g) by judging the pupil's work on its own merits and praising adequately each improvement;
(h) by keeping an individual record of the pupil's achievements and shortcomings or successes and failures. (This record should show quantitative and qualitative progress. The anecdotal type of record is recommended with entries made promptly after the occurrence of something worthy of entry).

3. It is imperative that the teacher use tact in introducing a pupil to the books and materials used in an Opportunity, Sight Saving or Speech Correction Unit. An abrupt change-over may induce hostility to the plan, and publicize within the school area the difficulties faced by a particular pupil.

Publicity and consequent discussion should be avoided. The teacher should consider that the pupil's difficulties are strictly confidential and should not discuss specific pupil's problems with anyone but the parent or the inspector. Even with trustees it is much better to treat in a very general way.

4. The pupils in Opportunity or other units are those who are able to progress at $\frac{1}{2}$, 3/5, 2/3, $\frac{3}{4}$, or 4/5 of a school year in a scholastic year, if individual methods are used and the handicap of hopeless competition is removed. (Teachers should note that pupils incapable of receiving instruction are very rare. Our data show 5 of every 20,000 pupils.)

5. Supplementary exercises in reading and arithmetic may be given with the class which is working at the pupil's grade level if it can be arranged without emotional reactions. Oral exercises in Social Studies, Science, Health, Music and Art should be taken at the highest level the pupil can comprehend.

6. Cleanliness is an aid to self-respect and self-confidence. Individual record sheets for daily marks in cleanliness and health should be used. This is a line of training in which a retarded pupil can excel.

7. Self-confidence should be developed. The following are helpful: games, hobbies, emphasis on abilities, responsibilities and monitorships, avoiding comparisons of work with that of brighter pupils by giving the pupil the privilege of using different books and taking oral work with the seniors in some subject.

8. Working at the blackboard, where large muscular movements are used, can be tried for spelling, arithmetic and for some writing lessons. Allow the child to rule lines on the board for use in writing lessons. The chief idea is to keep him physically relaxed and mentally at ease. Liberal encouragement should be given in all work.

9. Subject promotions should be given so as to avoid penalizing the pupil by remaining at a lower subject level in his good subjects.

BOOK LIST

These books are mainly for the teacher's use.

1. Training Handicapped Children - Ryerson
2. Everyday Manners - Macmillan
3. Manners Can Be Fun - Longmans
4. Is Your Face Red - Moyer
5. Balderson - Home Economics Workbook - Nelson
6. Russell, Karp and Kelly - Reading Aids Through the Grades - Bureau of Publications, Columbia University
7. Brueckner - Diagnostic Tests and Remedial Exercises - Winston
8. Garrison - At Home with Children
9. Kottmeyer - Handbook for Remedial Reading.

Reading Notes

1. Individual reading lessons are advised for one or more of the following reasons:-
   (a) The child is reading beyond his abilities and should be tried with easier materials;
   (b) He has now reached a mental age where he should begin learning to read;
   (c) He shows symptoms of defective eyesight, hearing or speech;
   (d) He appears to have an emotional handicap or a poor home background.

2. This pupil appears to have "hold-over habits" from Grade I. Symptoms of this are:
(1) that his rate of reading is excessively slow and deliberate due possibly to sounding each separate letter instead of instantly recognizing word-wholes or syllables;
(2) that he miscalls many words in oral reading making errors in the initial, middle or end portion of the words;
The teacher should attempt to trace back through the pupil's experience in reading to find out why these particular difficulties persist. Possibilities are:
(1) that he practices something associated with "initial letter phonics" the initial stage of phonics where key words are learned in order to have the child recognize initial sounds of words;
(2) that he has learned from looking at word families presented in column to pay attention to the end parts of words;
(3) that he has been trained by much practice to a slow letter by letter attack on new words;
(4) that he has attempted to learn reading before he was sufficiently mature mentally;
(5) that his eye habits are poorly trained;
(6) that his vocal muscular movements have not been trained sufficiently to read words in natural groups.

3. (a) Develop reading readiness by training this pupil:-
(1) to give initial sounds of words given orally by the teacher starting with a phonic word list;
(2) to complete a story in which the teacher tells the main part but leaves some details to be filled in;
(3) to practice the blending of sounds into words after the teacher has given the sounds separately in their proper order;
(4) to give words which are opposite in meaning to those given orally by the teacher.

(b) Develop ability to interpret pictures in sequence such as are shown in "Beginning Days", Macmillan and in the cartoon "Henry" in "The Globe and Mail". This picture reading is a pre-reading practice which permits the use of sentences in oral language.

4. This pupil should be introduced to words through matching with objects. The teacher should make each practice successful. When the practice is repeated even after a short period, the teacher should not expect the pupil to remember or permit the possibility of failure. The following procedure is suggested:
(1) provide common objects such as a pencil, a book and a knife and corresponding word cards accurately lettered in good print;
(2) the teacher places the word card in front of or beside the corresponding object several times;
(3) the teacher then places the word cards following the directions and hints given by the pupil (several times);
(4) the pupil places the word cards under the direction of the teacher;
(5) Repeat 2, 3, and 4 with the objects in a different way;
(6) Repeat 2, 3, and 4 matching the objects with the word cards;
(7) Repeat 2, 3, and 4 and 5 on the succeeding days until the pupil does it readily and accurately;
(8) Increase and change the number of objects as ability develops. The most important function of the teacher is to prevent failures.

5. Words may be presented by pictures pasted on cards about 7" x 5". These should be on display on the wall for a considerable time to permit review and successful habituation. The pupil should have half a dozen such pictures for the initial lesson. Additions should be made half-dozen at a time. The usual mistake in this method is the teaching of one such word at a time.

6. In the early stages of word analysis and synthesis it is important to get the pupil to give particular attention to the initial part of the word and to study the word consistently from the beginning to the end.
So called "wild guesses" and "Reversals" are frequently due to looking at the middle or the end of the word before the first part. Pupils need careful instruction to acquire the left-to-right procedure. This pupil shows many word substitutions or guesses and for that reason a review of this stage in reading is recommended. The teacher is asked to establish the habit of consistently viewing words from left to right by (1) calling the attention to initial letters, letter sounds and phonograms in the early stages of retraining;
(2) having the pupil look through the word from right to left when the endings such as ed, ing, and s are introduced;
Emphasize the reading of words from left to right. In the prereading programme this practice can be given with pictures.

7. A daily short period of ear-training is recommended until ability to translate sounds into printed words is achieved.
This training should be realistic and purposeful rather than mere sound training. It may be done by exercises like the following:
   (a) hearing and synthesizing the component sounds given by the teacher;
   (b) giving words which have the same initial sound or rhyme;
   (c) using rhymes, jingles and verses;
   (d) making up words by blending the sounds given by the teacher.

8. After reading readiness has been established by oral test of ability to recognize initial letter sounds and of ability to blend sound series of four or more sounds, the following programme is recommended in the order given.
   (1) initial letter phonics;
   (2) preferred phonograms, ar, aw, ay, oy, ight, ing, oi, oo as in look, ou, ow, as in 'show';
   (3) The double vowel phonograms (with the first vowel long and the second silent) as in 'peat', 'goat', 'mail', 'hide', and 'home'- 'able', 'ai', 'ain', 'air', 'ake', 'ame', 'are', 'ea', 'ee', 'ide', 'ie', 'ine', 'oa', 'oke', 'ore', 'ose';
   (4) Methods of attacking polysyllables - (a) recognizing the word from initial letter, (b) recognize and apply preferred phonograms, (c) recognize and apply the double vowel phonograms, (d) use of context clues, (e) recognition of word parts, (f) recognition of familiar words within larger words;
   (5) double letters - bb, ck, dd, ff, gg, th, dg, gh, ll, mm, nn, pp, qu, gu, rr, ss, tt, ph, ch.

9. The teacher should follow closely the teacher's manual accompanying the reader selected. The use of the manual makes the use of a different reader much easier for the teacher.

10. The readers selected for this pupil should be covered with paper or cloth during the time this pupil uses them. When the reader has been completed, it should be taken out of circulation for at least three months to guard against letting a junior pupil read it. When the time for re-entering it into circulation arrives, it should appear as a new book in its own bright binding without the cover.

11. This pupil shows an unusual number of word substitutions, omissions, repetitions, etc. Two recommendations are in order: (1) make cumulative lists of words substituted, omitted or refused and list them in horizontal lines either as unrelated words or in sentences for practice; (2) as a preliminary to reading, have this pupil read in concert with the teacher or another pupil before asking him to read the selection alone; (3) ear training as recommended in Note 14(a).

12. The use of a rectangular piece of paper to lie under the line to be read is often helpful with pupils who have difficulty in holding the place in reading.

13. This pupil points with his finger. The use of a rectangular piece of cardboard in which a slot has been cut is recommended. The slot can be enlarged from time to time until the pupil finds he can read without it. The slot should be wide enough to allow the pupil to see two lines of type.

14. Phrasing or the meaningful grouping of words should be practised regularly. This is advised to help overcome bad reading habits such as regressive eye-movements and long fixations. Meaningful word groups typed or print-written on sheets of paper are advised. Lip movements, vocalization and head movements should be discouraged.

15. The books for this pupil's reading unit have been chosen on or slightly below the grade level indicated by the teacher in her report given on the front of the intelligence test record form. (In most cases this grade level has been checked by an oral reading test.) The pupil should read through this book as quickly as possible and proceed to the next book indicated on the list. Slow-learning pupils require more practice than normal grade pupils. For this reason, there are usually two or three books indicated for each grade level so that progress may be indicated by promotion from book to book.

16. At the outset of a course of remedial instruction, the following conditions should be ascertained and recorded:
(a) at what grade level can the pupil read with suitable speed and comprehension?
(b) at what grade level can the pupil read and hold his attention to the work in hand? (This is called voluntary attention and is too often referred to as "concentration").

(c) Are there any symptoms like (i) eyestrain, (ii) far-sightedness, (iii) astigmatism, (iv) inability to fuse the images received by each eye?
(d) Are there any symptoms in silent reading and persistence of habits which may be hold-overs from primary stages of oral reading such as: (i) head and lip movements, (ii) audible articulation, (iii) long fixations of the eyes, regressive eye movements and numerous eye movements, (iv) errors in the beginning, middle or endings of words?
(e) At what speeds can he do oral or silent reading?
(f) Is the pupil a word reader or does he read by groups or phrases?

After this information has been collected, the teacher must select materials and methods which he judges will result in eliminating difficulties and reducing errors. The evidence collected would show the learning effects of the teaching. The teaching must be changed so that effective learning will take place.

17. By reading to this pupil from books of different grade levels and by questioning him on the general content, you can establish his comprehension level as a grade level. This level can then be used for grading the pupil in Social Studies and Science.

<u>Books for Teaching Reading</u> - Selections for this pupil are marked in pencil in the order they may be taken. If the readers marked are in use in your school, they should not be used with this pupil. Books of a similar grade from another series may be chosen.

<u>Easy Growth In Reading Series - Winston</u>

With Teacher's Manuals and Pupil's Workbooks

PP. Mac and Muff
The Twins, Tom and Don
Going To School
P. At Play
Fun In Story
I. I Know A Secret
Good Stories
II. Along The Way
The Story Road
III. Faraway Ports
Enchanting Stories
IV. Today and Tomorrow
V. Looking Forward
VI. Moving Ahead

<u>Ginn Basic Reading Series - Ginn and Co.</u>

With Teacher's Manuals and Pupil's Workbooks

Readiness - Fun With Tom & Betty
Games To Play
PP. My Little Red Story Book
My Little Green Story Book
My Little Blue Story Book
P. The Little White House
I. On Cherry Street
II. We Are Neighbours
Around The Corner
III. Finding New Neighbours
Friends Far and Near
IV. Roads To Everywhere
V. Trails To Treasure
VI. Wings To Adventure

Curriculum Foundation Series- Gage

With Teacher's Manuals and Pupil's Workbooks

I. Fun With Dick and Jane
Our New Friends
II. Friends and Neighbours
More Friends and Neighbours
III. Streets and Roads
More Streets and Roads
IV. Times and Places
V. Days and Deeds
VI. People and Progress
VII. Tales and Travel
VIII. Wonders and Workers

The New Work Play Series - MacMillan

With Teacher's Manuals and Pupil's Workbooks

P. Jim and Judy
I. Down Our Street
II. We Grow Up
III. Wide Wings
IV. Let's Look Around
V. Let's Travel On
VI. Let's Go Ahead

The Core Vocabulary Series - MacMillan

P. The Ranch Book
I. Rusty Wants a Dog
II. Smoky The Crow
III. Planes For Bob and Andy

Everyreader Series - Longmans

(No manuals or pupils' workbooks)

IV. Flamingo Feather
IV. Ben Hur
IV. Men Of Iron
IV. Tale of Two Cities
IV. The Gold Bug
IV. Sherlock Holmes

The Aeroplane Series - MacMillan

I. Straight Up
II. Straight Down
III. Planes For Bob and Andy
IV. Aeroplanes At Work

The Story Book Series - Winston

III-IV. The Story Book of Houses
The Story Book of Cotton
The Story Book of Oil
The Story Book of Rayon

The New Method Series Readers - Longmans

(No manuals - Pupils' exercises are on the back pages)

II. Kalulu, The Hare
III. Robinson Crusoe
Hoodt Hoodt
Traveller's Tales, etc.
Jameson's Journey
The Black Tulip
IV. Jungle John
King Solomon's Mines
V. The Black Arrow
Allan Quatermain
Treasure Island
Typee
VI. Ivanhoe

The Happy Venture Series - Clarke Irwin

Introductory - Fluff and Nip
Book I - Playtime
" II - Our Friends
"III - Growing Up
" IV - Holiday Time

The New Alice & Jerry Books - Copp Clark

(With Manuals and Pupils' Workbooks)

adiness - Here We Go
Over The Wall
PP - Skip Along
Under The Sky
Open The Door
High On A Hill
P - New Day In Day Out
The Wishing Well
I - New Round About
Anything Can Happen
II - New Down The River Road
New Friendly Village
Neighbours on The Hill
III - New Through The Green Gate
New If I Were Going
The Five-and-a Half Club

Reading For Meaning Series - Nelson

(With Teacher's Manuals and Pupil's Workbooks)

Readiness - Getting Ready
PP - Tip
Tip and Mitten
The Big Show
P - With Jack and Janet
I - Up and Away
II - Come Along
On We Go
III - Looking Ahead
Climbing Higher

Miscellaneous Books

II. Fun at the Playground - MacMillan
Skippy - MacMillan
III. Fun In Swimming - MacMillan
Our Earth - MacMillan
III-IV. Jimmy Flint's Last Haul - Longmans
Squinty Gets His Man - Longmans
IV. When Today Began - MacMillan
Using Our Earth - MacMillan
V. Lorna Doone - Gage
Tom Sawyer - Nelson
Uncle Tom's Cabin - Nelson

ARITHMETIC NOTES

1. Give work in arithmetic separate from the class using the indicated books and materials.

2. Give extra lessons in arithmetic. Be sure to give pupil opportunity to apply the fundamental processes to problems. The processes are tools only.

3. Choose exercises from "Drill Lessons and Seatwork" Chapter VII-Training Handicapped Children.

4. Cover the course outlined under "Arithmetic" Group I - pp 82, 125, 126 - Training Handicapped Children.

5. Give practice in counting forward and backward by 1, 2 to 20; to 50; by 5, to 10; to 50; to 100.

6. Arithmetic should be made realistic by dramatization and budgeting small amounts of money using catalogues for goods and prices.

7. Cover the course outlined under "Arithmetic" Group II - pp 82-83; 127-129, Training Handicapped Children.

8. Give daily practice in calculating simple purchases in store situations and making change from 5, 10, 15, 20, 25, and 50 using toy money (better if real money is used).

9. Cover the course outlined under "Arithmetic" Group III pp 83-84; 129-130, Training Handicapped Children.

10. Give practice in counting forward and backward by 4, 8 to 40; to 80; by 3, 6 to 30; to 60.

11. Make a set of cards containing the addition facts. On one side show the combination and on the other side show the addition. Let the pupil check his knowledge of the number facts by: (1) shuffling his cards to get them in the irregular order; (2) giving the sum and (3) checking his answer by turning the card. The wrong combinations should be proven by making piles of sizable objects such as bricks (anything which has some weight and can be procured in reasonably uniform size or made easily, will do as a substitute.

12. Make a set of cards for the subtraction facts. On one side the combination and on the other side show the answer. The top left hand corner should be cut off to show which side is to be held upward. Carry out the same procedure as is given in Note 11.

    If the cards are placed on the blackboard ledge and the pupil is encouraged to see how many cards he can get, the number of cards picked up each day can be used for motivation.

13. Make a set of cards for the multiplication facts. Carry out procedures similar to that given in Note 12.

14. Make a set of cards for the division facts. Carry out procedures similar to that given in Note 12.

15. Let the pupil use a set of tables to do his mechanical work or problems.

ARITHMETIC BOOK LIST

1. Numberland - Gage
2. Under the Number Tree - Moyers
3. Set of Toy Money (paper) Moyer or Hendry
4. Number Play - MacMillan
5. Jolly Numbers - Ginn
6. My Arithmetic Tablet - Longmans
7. In Numberland - MacMillan
8. Arithmetic Bingo (Addition package) School Publishing & Speciality Co.
9. Arithmetic Is Fun - Dent
10. Individual Arithmetic Book - Ginn
11. Number Stories Book 1 - Gage
12. Washburne Individual Arithmetic Book I - Gage
13. Numbers at Work - MacMillan
14. My Practice Book In Arithmetic, Book I - Longmans
15. Arithmetic Bingo (Subtraction package) School Publishing & Specialty Co.
20. Individual Arithmetic Book B - Ginn
21. Number Stories Book II - Gage
22. Washburne Individual Arithmetic Book II - Gage
23. Five Sheets of Cardboard for Number Facts
24. Lennes Tests and Practice Book I - Clark Irwin
25. Lennes Tests and Practice Book II - Clark Irwin
26. Opportunity Workbooks Arithmetic Grade II - Nelson
27. My Practice Book in Arithmetic Book II - Longmans
28. Arithmetic Bingo (Multiplication package) - School Publishing & Speciality Company
30. Individual Arithmetic Book C - Ginn
31. Washburne Individual Arithmetic Book III - Gage
32. Essentials of Arithmetic Book III - Clarke Irwin
33. Self-Help Arithmetic Workbook Grade III - Gage
34. Opportunity Workbooks, Arithmetic Grade III - Nelson
35. New Progress Arithmetic, Book A - MacMillan
36. Arithmetic Bingo (Division package) School Publishing & Specialty Co.
40. Washburne Individual Arithmetic Book IV - Gage
41. Essentials of Arithmetic Book IV - Clarke Irwin
42. Self Help Arithmetic Workbook Grade IV - Gage

LANGUAGE NOTES

1. Give work in language separate from the class using the indicated books and materials.

2. Give a separate unit in spelling using the indicated books and materials.

3. By experiment find how many words this pupil can spell correctly in one period. Give him spelling at this rate, increasing the number experimentally from time to time and progressing by very minute gradations, very simply dictation exercises and to more difficult work.

4. Give practice in finding words in the dictionary. The basic requirement is that the pupil recognizes the letters of the alphabet when he sees them. The pupil should be taught:- (1) to locate words at the first and last quarters and the middle of the book. (2) to riffle pages and at the same time catch the first letters of the key words or syllables as they pass by. (3) where to find these key words on the page.

5. Give practice in finding names of people in the Telephone Book.

6. Printing the vocabulary of the reader on cards using a small printing set is excellent practice in spelling. These cards could later be used for matching exercises and games. Instead of a printing set, large type letters may be cut from the newspapers and pasted together to form the required words.

7. Silent Reading exercises are sometimes efficient in improving abilities in language. The teacher's main function is to check the answers if prepared lessons are used. Use the texts indicated.

8. Take oral work in composition, social studies and science with the class.

9. Failure in spelling may be connected with faulty sight, hearing and speech. Record errors in spelling under the following heads:-
   Vision (a) Letter substitution or duplication
   (b) Letter transposition
   Hearing (a) Wrong endings
   (b) Letter substitutions
   Phonics (a) Wrong phonogram
   (b) See Reading Notes 14 and 15.

10. Composition - Groups I and II - pp 80-81; 123 - Training Handicapped Children.

11. Use manuscript or print writing for spelling.

LANGUAGE BOOKS

1. Mary, John and Peter Workbooks - Gage
2. Mary, John and Peter Workbook - Dent
3. Printing set (50¢ - $1.25) - Eaton's
10. Everyday Words Bk. I - Clarke Irwin
11. Meet Safety Sam - Longmans
12. Webster Language Workbook I - Longmans
20. Essentials of Everyday English Book II - Clarke Irwin
21. Practice Activities in English Grade II - Gage
22. Safety Sam's Friends - Longmans
23. Webster Language Workbook - Grade II - Longmans
24. Red Deer The Indian Boy - Moyer
25. Pupils' Own Vocabulary Speller Book 2 - MacMillan
26. My Workbook In Spelling Book 2 - Ginn
30. Thorndike Dictionary for Juniors - Gage
31. Nature Study Workbook - Grade III - School Publications and Speciality Company
32. Everyday Words Book II - Clarke Irwin

33. Essentials of Everyday English Book III - Clarke Irwin
34. My Workbook In Spelling, Book III - Ginn
35. Practice Activities in English Grade III - Gage
36. Webster Language Workbook Grade III - Longmans
37. Sharp's Useful Language Grade III - Longmans
38. Everyday Words - Book II - Clarke Irwin
39. Pupils' Own Vocabulary Speller, Grade III - MacMillan
40. Everyday Words Book III - Clarke Irwin
41. Essentials of Everyday English Book IV - Clarke Irwin
42. Social Studies Silent Reader Book III - Copp
43. Practice Activities in English Grade IV - Gage
44. Webster Language Workbooks Book IV - Longmans
45. Sharp's Useful Language Grade IV - Longmans
46. Pupils' Own Vocabulary Speller, Grade IV - MacMillan
47. Ballards Fundamental English Book II - Clarke Irwin
48. My Workbook in Spelling - Book IV - Ginn
50. Everyday Words Book IV - Clarke Irwin
51. Essentials of Everyday English Book V - Clarke Irwin
52. Social Studies Silent Reader Book IV - Copp
53. Social Studies Silent Reader Book V - Copp
54. Practice Activities in English Grade V - Gage
55. Webster Language Workbooks Grade V - Longmans
56. Sharp's Useful Language Grade V - Longmans
57. Pupils' Own Vocabulary Speller Book V - MacMillan
58. Ballards Fundamental English Book III - Clarke Irwin
59. My Workbook In Spelling Book V - Ginn
60. Essentials of Everyday English Book VI - Clarke Irwin
61. Webster Language Workbooks Grade VI - Longmans
62. Sharp's Useful Language Grade VI - Longmans
63. Brueckner's Diagnostic Tests and Remedial Exercises in Reading - Winston
64. Pupils' Own Vocabulary Speller, Bk.6 - MacMillan
65. My Workbook In Spelling, Book 6 - Ginn
70. Essentials of Everyday English Book VII - Clarke Irwin
71. Webster Language Workbooks Grade VII - Longmans
72. Sharp's Useful Language Workbooks Grade VII - Longmans
39. Scottie and His Friends - Moyer

NOTES ON HANDICRAFT PROJECTS

1. (a) Handicrafts or handwork or enterprises may be given to children for several different reasons. When a child has repeatedly met defeat, the first step in his re-establishment is to restore his self confidence. The creation of something concrete, through his own efforts, is one of the quietest and most satisfactory means of bringing pleasure and joy to release the inhibitions created by frustration. For this reason, the first handwork should be chosen with great care. Models quickly made and not requiring too great detail or care are useful. Projects which allow activity as well as satisfy the creative instincts are valuable.

(b) Handwork is a valuable means of developing muscular control, and co-ordination movements of eye and hand. It is more interesting than continual practising of writing.

(c) Handicraft may be an excellent introduction to some form of vocational training, even where handwork does not lead directly into some vocation. Ability to use the hands with dexterity, to be precise and neat in tasks, to replace and care for tools and equipment is excellent preparation for work in general field of labour.

(d) Handicraft can form a valuable means of recreation. Types of handwork which can later be carried on in the home environment should be encouraged.

2. Give tracing, colouring, cutting, pasting. The use of a scrapbook would be helpful.

3. Give Preprimer and Primer occupations - plasticene, paper weaving, bead stringing, sewing cards of a very simple type, large perforations.

4. Make a spool knitter (or buy one at a variety store) for giving the pupil repetitive manipulation which he can do. The knitting can be sewn into a circular mat.

5. Give simple basket making on wooden bases.

6. Give coping saw cut-outs with simple outlines. Order coping saw and half dozen blades. Use basswood, 3/8" or 5/8" dressed on both sides, 8" wide. Order approximately 6'.

7. Practical applications of knitting and sewing would be suitable for this pupil - scarf, mitts, pull-over, pot-holder, apron, etc.
(a) order 3 oz. 4-ply wool, 1 pair bone knitting needles #10, more wool as needed;
(b) 1 yard gingham, pattern, needles, thread, etc.

8. Substitute knitting and sewing in the case of girls and woodwork in the case of boys for <u>written</u> exercises in Social Studies and Science.

9. Enterprise work should be stressed for this pupil, particularly work in murals (or large-sized drawings), in model-making and in oral English. The work should be on as large scale as possible and this pupil should be encouraged to contribute in making; (1) cardboard construction; (2) wood models; (3) modelling in such plastics as local clay, salt and flour, asbestos cement, sawdust and flour paste, papier mache, etc.

10. A bird house project is recommended for this boy. Get Extension Circular #10 from the Ontario Agricultural College, Guelph.

11. Make a rake knitter for knitting scarves and togues.

12. Buy a weave. Get it at the variety store for weaving small squares which can be sewn into an afghan.

<u>MATERIALS FOR HANDICRAFTS AND PROJECTS</u>

1. Order sewing cards, paper and oilcloth, weaving mats, one pound of plasticene, a spool knitter and 3 oz. of 4-ply wool from your local store or Moyers or Hendrys.
2. Our First Colouring Book - Eaton's
3. Box of crayons.

4. Order a coping saw, 6 blades, 1 lb. of assorted finishing nails 1" - 2" at a hardware store.
5. Order lumber from the nearest dealer - (a) 5 ft. of basswood or white pine 3/8"x8" D2S and (b) 5 ft. of basswood or white pine 7/8"x8" D2S.
6. Order Lydford's "Junior Draughting", Richardson, Bond & Wright, Owen Sound (60¢).
7. Order Palmer's "Coping Saw Cut Outs" - Gage
8. Order "Things To Make" - School Publishing & Specialty Co.
9. Order 10 ft. of lumber 1" x 8" or 1" x 10" common grade for fold frame.
10. Order 1 pr. bone knitting needles #10; 3 oz. 4-ply beehive wool or similar type, more as needed.
11. Order a knitting book. Teach pupil to follow directions.
12. Order 1 yd. of gingham, pattern, needles, thread. Choose models of interest which will not take too long to complete such as a pot holder or apron.
13. Order materials for a quilt for a child's crib and a simple pattern for embroidering the blocks.
14. Order white cotton and print for patchwork quilt for a child's crib.
15. Order gummed paper and loose-leaf workbook for museum catalogue.
16. Order "Coping Saw Carpentry" - Moyers.
17. A Little Girl's Treasury of Things To Do - Ages 6-9 - The Book Society of Canada, 88 Richmond St., Toronto.
18. A Young Boy's Treasury of Things To Do - Ages 6-9 - The Book Society of Canada, 88 Richmond St., Toronto.
19. A Girl's Treasury of Things To Do - Ages 9-12 - The Book Society of Canada, 88 Richmond St., Toronto.
20. A Boy's Treasury of Things To Do - Ages 9-12 - The Book Society of Canada, 88 Richmond St., Toronto.

Key No. 8H - Direct Learner
Girl or Boy - (7-12)

Advisement For

Name	Age	Grade	School

Note - This is a compilation of suggestions for the education of a pupil whose learning rate is much below average. Paragraphs and titles of books are marked if the examiner wishes to convey some special advice to the teacher. Where the board provides the learning materials suggested, a special grant of $5.00 per pupil per annum may be earned.

Additional suggestions may be written under "Examiner's Remarks".

Examiner's Remarks

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Examiner's Remarks

General Notes

1. This advisement is prepared so as to cover the pupil's requirements in books and materials for a period of one year or more. The specific recommendations as to methods are not to be considered as final because as the pupil readjusts and develops the methods indicated may have to be changed or abandoned. The materials suggested for Craft Work or any other subject should be renewed as often as is necessary.

2. When a pupil has failed hour after hour, day after day, week after week, month after month, term after term and year after year, he usually has an unfavourable attitude to school and to certain academic subjects. He may show a definite emotional reaction or a well-developed defence which is inimical to his future chances of success. His record of failure must be changed and this is usually managed in one or all of the following ways:

(a) by finding his level of ability in reading, arithmetic and language and by selecting books, methods and materials which are suited to these levels and any special conditions;
(b) by having the pupil proceed at his individual rate;
(c) by an examination to discover sight, speech, hearing, muscular coordination and emotional handicaps;
(d) by introducing crafts which are of interest to the pupil and which provide him with tangible evidence of success;
(e) by the use of enterprises or projects in which the work of this pupil can earn legitimate praise;
(f) by social pressure and human engineering (not by the direct application of physical force and too frequent use of commands.);
(g) by judging the pupil's work on its own merits and praising adequately each improvement;
(h) by keeping an individual record of the pupil's achievements and shortcomings or successes and failures. (This record should show quantitative and qualitative progress. The anecdotal type of record is recommended with entries made promptly after the occurrence of something worthy of entry).

3. It is imperative that the teacher use tact in introducing a pupil to the books and materials used in an Opportunity, Sight Saving or Speech Correction Unit. An abrupt change-over may induce hostility to the plan, and publicize within the school area the difficulties faced by a particular pupil.

Publicity and consequent discussion should be avoided. The teacher should consider that the pupil's difficulties are strictly confidential and should not discuss specific pupil's problems with anyone but the parent or the inspector. Even with trustees it is much better to treat in a very general way.

4. The pupils in Opportunity or other units are those who are able to progress at $\frac{1}{2}$, 3/5, 2/3, $\frac{3}{4}$, or 4/5 of a school year in a scholastic year, if individual methods are used and the handicap of hopeless competition is removed. (Teachers should note that pupils incapable of receiving instruction are very rare. Our data show 5 of every 20,000 pupils.)

5. Supplementary exercises in reading and arithmetic may be given with the class which is working at the pupil's grade level if it can be arranged without emotional reactions. Oral exercises in Social Studies, Science, Health, Music and Art should be taken at the highest level the pupil can comprehend.

6. Cleanliness is an aid to self-respect and self-confidence. Individual record sheets for daily marks in cleanliness and health should be used. This is a line of training in which a retarded pupil can excel.

7. Self-confidence should be developed. The following are helpful: games, hobbies, emphasis on abilities, responsibilities and monitorships, avoiding comparisons of work with that of brighter pupils by giving the pupil the privilege of using different books and taking oral work with the seniors in some subject.

8. Working at the blackboard, where large muscular movements are used, can be tried for spelling, arithmetic and for some writing lessons. Allow the child to rule lines on the board for use in writing lessons. The chief idea is to keep him physically relaxed and mentally at ease. Liberal encouragement should be given in all work.

9. Subject promotions should be given so as to avoid penalizing the pupil by remaining at a lower subject level in his good subjects.

BOOK LIST

These books are mainly for the teacher's use.

1. Training Handicapped Children - Ryerson
2. Everyday Manners - Macmillan
3. Manners Can Be Fun - Longmans
4. Is Your Face Red - Moyer
5. Balderson - Home Economics Workbook - Nelson
6. Russell, Karp and Kelly - Reading Aids Through the Grades - Bureau of Publications, Columbia University
7. Brueckner - Diagnostic Tests and Remedial Exercises - Winston
8. Garrison - At Home with Children
9. Kottmeyer - Handbook for Remedial Reading

Reading Notes

1. Individual reading lessons are advised for one or more of the following reasons:-
   (a) The child is reading beyond his abilities and should be tried with easier materials;
   (b) He has now reached a mental age where he should begin learning to read;
   (c) He shows symptoms of defective eyesight, hearing or speech;
   (d) He appears to have an emotional handicap or a poor home background.

2. This pupil appears to have "hold-over habits" from Grade I. Symptoms of this are:
(1) that his rate of reading is excessively slow and deliberate due possibly to sounding each separate letter instead of instantly recognizing word-wholes or syllables;
(2) that he miscalls many words in oral reading making errors in the initial, middle or end portion of the words;
The teacher should attempt to trace back through the pupil's experience in reading to find out why these particular difficulties persist. Possibilities are:
(1) that he practices something associated with "initial letter phonics" the initial stage of phonics where key words are learned in order to have the child recognize initial sounds of words;
(2) that he has learned from looking at word families presented in column to pay attention to the end parts of words;
(3) that he has been trained by much practice to a slow letter by letter attack on new words;
(4) that he has attempted to learn reading before he was sufficiently mature mentally;
(5) that his eye habits are poorly trained;
(6) that his vocal muscular movements have not been trained sufficiently to read words in natural groups.

3. (a) Develop reading readiness by training this pupil:-
(1) to give initial sounds of words given orally by the teacher starting with a phonic word list;
(2) to complete a story in which the teacher tells the main part but leaves some details to be filled in;
(3) to practice the blending of sounds into words after the teacher has given the sounds separately in their proper order;
(4) to give words which are opposite in meaning to those given orally by the teacher.

(b) Develop ability to interpret pictures in sequence such as are shown in "Beginning Days", Macmillan and in the cartoon "Henry" in "The Globe and Mail". This picture reading is a pre-reading practice which permits the use of sentences in oral language.

4. This pupil should be introduced to words through matching with objects. The teacher should make each practice successful. When the practice is repeated even after a short period, the teacher should not expect the pupil to remember or <u>permit the possibility of failure.</u> The following procedure is suggested:
(1) provide common objects such as a pencil, a book and a knife and corresponding word cards accurately lettered in good print;
(2) the teacher places the word card in front of or beside the corresponding object several times;
(3) the teacher then places the word cards following the directions and hints given by the pupil (several times);
(4) the pupil places the word cards under the direction of the teacher;
(5) Repeat 2, 3, and 4 with the objects in a different way;
(6) Repeat 2, 3, and 4 matching the objects with the word cards;
(7) Repeat 2, 3, and 4 and 5 on the succeeding days until the pupil does it readily and accurately;
(8) Increase and change the number of objects as ability develops. The most important function of the teacher is to prevent failures.

5. Words may be presented by pictures pasted on cards about 7" x 5". These should be on display on the wall for a considerable time to permit review and successful habituation. The pupil should have half a dozen such pictures for the initial lesson. Additions should be made half-dozen at a time. The usual mistake in this method is the teaching of one such word at a time.

6. In the early stages of word analysis and synthesis it is important to get the pupil to give particular attention to the initial part of the word and to study the word consistently from the beginning to the end.
So called "wild guesses" and "Reversals" are frequently due to looking at the middle or the end of the word before the first part. Pupils need careful instruction to acquire the left-to-right procedure. This pupil shows many word substitutions or guesses and for that reason a review of this stage in reading is recommended. The teacher is asked to establish the habit of consistently viewing words from left to right by (1) calling the attention to initial letters, letter sounds and phonograms in the early stages of retraining;
(2) having the pupil look through the word from right to left when the endings such as ed, ing, and s are introduced;
Emphasize the reading of words from left to right. In the prereading programme this practice can be given with pictures.

7. A daily short period of ear-training is recommended until ability to translate sounds into printed words is achieved.
This training should be realistic and purposeful rather than mere sound training. It may be done by exercises like the following:
   (a) hearing and synthesizing the component sounds given by the teacher;
   (b) giving words which have the same initial sound or rhyme;
   (c) using rhymes, jingles and verses;
   (d) making up words by blending the sounds given by the teacher.

8. After reading readiness has been established by oral test of ability to recognize initial letter sounds and of ability to blend sound series of four or more sounds, the following programme is recommended in the order given.
   (1) initial letter phonics;
   (2) preferred phonograms, ar, aw, ay, oy, ight, ing, oi, oo as in look, ou, ow, as in 'show';
   (3) The double vowel phonograms (with the first vowel long and the second silent) as in 'peat', 'goat', 'mail', 'hide', and 'home'- 'able', 'ai', 'ain', 'air', 'ake', 'ame', 'are', 'ea', 'ee', 'ide', 'ie', 'ine', 'oa', 'oke', 'ore', 'ose';
   (4) Methods of attacking polysyllables - (a) recognizing the word from initial letter, (b) recognize and apply preferred phonograms, (c) recognize and apply the double vowel phonograms, (d) use of context clues, (e) recognition of word parts, (f) recognition of familiar words within larger words;
   (5) double letters - bb, ck, dd, ff, gg, th, dg, gh, ll, mm, nn, pp, qu, gu, rr, ss, tt, ph, ch.

9. The teacher should follow closely the teacher's manual accompanying the reader selected. The use of the manual makes the use of a different reader much easier for the teacher.

10. The readers selected for this pupil should be covered with paper or cloth during the time this pupil uses them. When the reader has been completed, it should be taken out of circulation for at least three months to guard against letting a junior pupil read it. When the time for re-entering it into circulation arrives, it should appear as a new book in its own bright binding without the cover.

11. This pupil shows an unusual number of word substitutions, omissions, repetitions, etc. Two recommendations are in order: (1) make cumulative lists of words substituted, omitted or refused and list them in horizontal lines either as unrelated words or in sentences for practice; (2) as a preliminary to reading, have this pupil read in concert with the teacher or another pupil before asking him to read the selection alone; (3) ear training as recommended in Note 14(a).

12. The use of a rectangular piece of paper to lie under the line to be read is often helpful with pupils who have difficulty in holding the place in reading.

13. This pupil points with his finger. The use of a rectangular piece of cardboard in which a slot has been cut is recommended. The slot can be enlarged from time to time until the pupil finds he can read without it. The slot should be wide enough to allow the pupil to see two lines of type.

14. Phrasing or the meaningful grouping of words should be practised regularly. This is advised to help overcome bad reading habits such as regressive eye-movements and long fixations. Meaningful word groups typed or print-written on sheets of paper are advised. Lip movements, vocalization and head movements should be discouraged.

15. The books for this pupil's reading unit have been chosen on or slightly below the grade level indicated by the teacher in her report given on the front of the intelligence test record form. (In most cases this grade level has been checked by an oral reading test.) The pupil should read through this book as quickly as possible and proceed to the next book indicated on the list. Slow-learning pupils require more practice than normal grade pupils. For this reason, there are usually two or three books indicated for each grade level so that progress may be indicated by promotion from book to book.

16. At the outset of a course of remedial instruction, the following conditions should be ascertained and recorded:
(a) at what grade level can the pupil read with suitable speed and comprehension?
(b) at what grade level can the pupil read and hold his attention to the work in hand? (This is called voluntary attention and is too often referred to as "concentration").

(c) Are there any symptoms like (i) eyestrain, (ii) far-sightedness, (iii) astigmatism, (iv) inability to fuse the images received by each eye?
(d) Are there any symptoms in silent reading and persistence of habits which may be hold-overs from primary stages of oral reading such as: (i) head and lip movements, (ii) audible articulation, (iii) long fixations of the eyes, regressive eye movements and numerous eye movements, (iv) errors in the beginning, middle or endings of words?
(e) At what speeds can he do oral or silent reading?
(f) Is the pupil a word reader or does he read by groups or phrases?

After this information has been collected, the teacher must select materials and methods which he judges will result in eliminating difficulties and reducing errors. The evidence collected would show the learning effects of the teaching. The teaching must be changed so that effective learning will take place.

17. By reading to this pupil from books of different grade levels and by questioning him on the general content, you can establish his comprehension level as a grade level. This level can then be used for grading the pupil in Social Studies and Science.

<u>Books for Teaching Reading</u> - Selections for this pupil are marked in pencil in the order they may be taken. If the readers marked are in use in your school, they should not be used with this pupil. Books of a similar grade from another series may be chosen.

<u>Easy Growth In Reading Series - Winston</u>

With Teacher's Manuals and Pupil's Workbooks

PP. Mac and Muff
The Twins, Tom and Don
Going To School
P. At Play
Fun In Story
I. I Know A Secret
Good Stories
II. Along The Way
The Story Road
III. Faraway Ports
Enchanting Stories
IV. Today and Tomorrow
V. Looking Forward
VI. Moving Ahead

<u>Ginn Basic Reading Series - Ginn and Co.</u>

With Teacher's Manuals and Pupil's Workbooks

Readiness - Fun With Tom & Betty
Games To Play
PP. My Little Red Story Book
My Little Green Story Book
My Little Blue Story Book
P. The Little White House
I. On Cherry Street
II. We Are Neighbours
Around The Corner
III. Finding New Neighbours
Friends Far and Near
IV. Roads To Everywhere
V. Trails To Treasure
VI. Wings To Adventure

Curriculum Foundation Series- Gage

With Teacher's Manuals and Pupil's Workbooks

I. Fun With Dick and Jane
Our New Friends
II. Friends and Neighbours
More Friends and Neighbours
III. Streets and Roads
More Streets and Roads
IV. Times and Places
V. Days and Deeds
VI. People and Progress
VII. Tales and Travel
VIII. Wonders and Workers

The New Work Play Series - MacMillan

With Teacher's Manuals and Pupil's Workbooks

P. Jim and Judy
I. Down Our Street
II. We Grow Up
III. Wide Wings
IV. Let's Look Around
V. Let's Travel On
VI. Let's Go Ahead

The Core Vocabulary Series - MacMillan

P. The Ranch Book
I. Rusty Wants a Dog
II. Smoky The Crow
III. Planes For Bob and Andy

Everyreader Series - Longmans

(No manuals or pupils' workbooks)

IV. Flamingo Feather
IV. Ben Hur
IV. Men Of Iron
IV. Tale of Two Cities
IV. The Gold Bug
IV. Sherlock Holmes

The Aeroplane Series - MacMillan

I. Straight Up
II. Straight Down
III. Planes For Bob and Andy
IV. Aeroplanes At Work

The Story Book Series - Winston

III-IV. The Story Book of Houses
The Story Book of Cotton
The Story Book of Oil
The Story Book of Rayon

The New Method Series Readers - Longmans

(No manuals - Pupils' exercises are on the back pages)

II. Kalulu, The Hare
III. Robinson Crusoe
Hoodt Hoodt
Traveller's Tales, etc.
Jameson's Journey
The Black Tulip
IV. Jungle John
King Solomon's Mines
V. The Black Arrow
Allan Quatermain
Treasure Island
Typee
VI. Ivanhoe

The Happy Venture Series - Clarke Irwin

Introductory - Fluff and Nip
Book I - Playtime
" II - Our Friends
"III - Growing Up
" IV - Holiday Time

The New Alice & Jerry Books - Copp Clark

(With Manuals and Pupils' Workbooks)

eadiness - Here We Go
Over The Wall
PP - Skip Along
Under The Sky
Open The Door
High On A Hill
P - New Day In Day Out
The Wishing Well
I - New Round About
Anything Can Happen
II - New Down The River Road
New Friendly Village
Neighbours on The Hill
III - New Through The Green Gate
New If I Were Going
The Five-and-a Half Club

Reading For Meaning Series - Nelson

(With Teacher's Manuals and Pupil's Workbooks)

Readiness - Getting Ready
PP - Tip
Tip and Mitten
The Big Show
P - With Jack and Janet
I - Up and Away
II - Come Along
On We Go
III - Looking Ahead
Climbing Higher

Miscellaneous Books

II. Fun at the Playground - MacMillan
Skippy - MacMillan
III. Fun In Swimming - MacMillan
Our Earth - MacMillan
III-IV. Jimmy Flint's Last Haul - Longmans
Squinty Gets His Man - Longmans
IV. When Today Began - MacMillan
Using Our Earth - MacMillan
V. Lorna Doone - Gage
Tom Sawyer - Nelson
Uncle Tom's Cabin - Nelson

ARITHMETIC NOTES

1. Give work in arithmetic separate from the class using the indicated books and materials.

2. Give extra lessons in arithmetic. Be sure to give pupil opportunity to apply the fundamental processes to problems. The processes are tools only.

3. Choose exercises from "Drill Lessons and Seatwork" Chapter VII-Training Handicapped Children.

4. Cover the course outlined under "Arithmetic" Group I - pp 82, 125, 126 - Training Handicapped Children.

5. Give practice in counting forward and backward by 1, 2 to 20; to 50; by 5, to 10; to 50; to 100.

6. Arithmetic should be made realistic by dramatization and budgeting small amounts of money using catalogues for goods and prices.

7. Cover the course outlined under "Arithmetic" Group II - pp 82-83; 127-129, Training Handicapped Children.

8. Give daily practice in calculating simple purchases in store situations and making change from 5, 10, 15, 20, 25, and 50 using toy money (better if real money is used).

9. Cover the course outlined under "Arithmetic" Group III pp 83-84; 129-130, Training Handicapped Children.

10. Give practice in counting forward and backward by 4, 8 to 40; to 80; by 3, 6 to 30; to 60.

11. Make a set of cards containing the addition facts. On one side show the combination and on the other side show the addition. Let the pupil check his knowledge of the number facts by: (1) shuffling his cards to get them in the irregular order; (2) giving the sum and (3) checking his answer by turning the card. The wrong combinations should be proven by making piles of sizable objects such as bricks (anything which has some weight and can be procured in reasonably uniform size or made easily, will do as a substitute.

12. Make a set of cards for the subtraction facts. On one side the combination and on the other side show the answer. The top left hand corner should be cut off to show which side is to be held upward. Carry out the same procedure as is given in Note 11.

    If the cards are placed on the blackboard ledge and the pupil is encouraged to see how many cards he can get, the number of cards picked up each day can be used for motivation.

13. Make a set of cards for the multiplication facts. Carry out procedures similar to that given in Note 12.

14. Make a set of cards for the division facts. Carry out procedures similar to that given in Note 12.

15. Let the pupil use a set of tables to do his mechanical work or problems.

ARITHMETIC BOOK LIST

1. Numberland - Gage
2. Under the Number Tree - Moyers
3. Set of Toy Money (paper) Moyer or Hendry
4. Number Play - MacMillan
5. Jolly Numbers - Ginn
6. My Arithmetic Tablet - Longmans
7. In Numberland - MacMillan
8. Arithmetic Bingo (Addition package) School Publishing & Speciality Co.
9. Arithmetic Is Fun - Dent
10. Individual Arithmetic Book - Ginn
11. Number Stories Book 1 - Gage
12. Washburne Individual Arithmetic Book I - Gage
13. Numbers at Work - MacMillan
14. My Practice Book In Arithmetic, Book I - Longmans
15. Arithmetic Bingo (Subtraction package) School Publishing & Specialty Co.
20. Individual Arithmetic Book B - Ginn
21. Number Stories Book II - Gage
22. Washburne Individual Arithmetic Book II - Gage
23. Five Sheets of Cardboard for Number Facts
24. Lennes Tests and Practice Book I - Clark Irwin
25. Lennes Tests and Practice Book II - Clark Irwin
26. Opportunity Workbooks Arithmetic Grade II - Nelson
27. My Practice Book in Arithmetic Book II - Longmans
28. Arithmetic Bingo (Multiplication package) - School Publishing & Speciality Company
30. Individual Arithmetic Book C - Ginn
31. Washburne Individual Arithmetic Book III - Gage
32. Essentials of Arithmetic Book III - Clarke Irwin
33. Self-Help Arithmetic Workbook Grade III - Gage
34. Opportunity Workbooks, Arithmetic Grade III - Nelson
35. New Progress Arithmetic, Book A - MacMillan
36. Arithmetic Bingo (Division package) School Publishing & Specialty Co.
40. Washburne Individual Arithmetic Book IV - Gage
41. Essentials of Arithmetic Book IV - Clarke Irwin
42. Self Help Arithmetic Workbook Grade IV - Gage

LANGUAGE NOTES

1. Give work in language separate from the class using the indicated books and materials.

2. Give a separate unit in spelling using the indicated books and materials.

3. By experiment find how many words this pupil can spell correctly in one period. Give him spelling at this rate, increasing the number experimentally from time to time and progressing by very minute gradations, very simply dictation exercises and to more difficult work.

4. Give practice in finding words in the dictionary. The basic requirement is that the pupil recognizes the letters of the alphabet when he sees them. The pupil should be taught:- (1) to locate words at the first and last quarters and the middle of the book. (2) to riffle pages and at the same time catch the first letters of the key words or syllables as they pass by. (3) where to find these key words on the page.

5. Give practice in finding names of people in the Telephone Book.

6. Printing the vocabulary of the reader on cards using a small printing set is excellent practice in spelling. These cards could later be used for matching exercises and games. Instead of a printing set, large type letters may be cut from the newspapers and pasted together to form the required words.

7. Silent Reading exercises are sometimes efficient in improving abilities in language. The teacher's main function is to check the answers if prepared lessons are used. Use the texts indicated.

8. Take oral work in composition, social studies and science with the class.

9. Failure in spelling may be connected with faulty sight, hearing and speech. Record errors in spelling under the following heads:-
   Vision (a) Letter substitution or duplication
   (b) Letter transposition
   Hearing (a) Wrong endings
   (b) Letter substitutions
   Phonics (a) Wrong phonogram
   (b) See Reading Notes 14 and 15.

10. Composition - Groups I and II - pp 80-81; 123 - Training Handicapped Children.

11. Use manuscript or print writing for spelling.

LANGUAGE BOOKS

1. Mary, John and Peter Workbooks - Gage
2. Mary, John and Peter Workbook - Dent
3. Printing set (50¢ - $1.25) - Eaton's
10. Everyday Words Bk. I - Clarke Irwin
11. Meet Safety Sam - Longmans
12. Webster Language Workbook I - Longmans
20. Essentials of Everyday English Book II - Clarke Irwin
21. Practice Activities in English Grade II - Gage
22. Safety Sam's Friends - Longmans
23. Webster Language Workbook - Grade II - Longmans
24. Red Deer The Indian Boy - Moyer
25. Pupils' Own Vocabulary Speller Book 2 - MacMillan
26. My Workbook In Spelling Book 2 - Ginn
30. Thorndike Dictionary for Juniors - Gage
31. Nature Study Workbook - Grade III - School Publications and Speciality Company
32. Everyday Words Book II - Clarke Irwin

33. Essentials of Everyday English Book III - Clarke Irwin
34. My Workbook In Spelling, Book III - Ginn
35. Practice Activities in English Grade III - Gage
36. Webster Language Workbook Grade III - Longmans
37. Sharp's Useful Language Grade III - Longmans
38. Everyday Words - Book II - Clarke Irwin
39. Pupils' Own Vocabulary Speller, Grade III - MacMillan
40. Everyday Words Book III - Clarke Irwin
41. Essentials of Everyday English Book IV - Clarke Irwin
42. Social Studies Silent Reader Book III - Copp
43. Practice Activities in English Grade IV - Gage
44. Webster Language Workbooks Book IV - Longmans
45. Sharp's Useful Language Grade IV - Longmans
46. Pupils' Own Vocabulary Speller, Grade IV - MacMillan
47. Ballards Fundamental English Book II - Clarke Irwin
48. My Workbook in Spelling - Book IV - Ginn
50. Everyday Words Book IV - Clarke Irwin
51. Essentials of Everyday English Book V - Clarke Irwin
52. Social Studies Silent Reader Book IV - Copp
53. Social Studies Silent Reader Book V - Copp
54. Practice Activities in English Grade V - Gage
55. Webster Language Workbooks Grade V - Longmans
56. Sharp's Useful Language Grade V - Longmans
57. Pupils' Own Vocabulary Speller Book V - MacMillan
58. Ballards Fundamental English Book III - Clarke Irwin
59. My Workbook In Spelling Book V - Ginn
60. Essentials of Everyday English Book VI - Clarke Irwin
61. Webster Language Workbooks Grade VI - Longmans
62. Sharp's Useful Language Grade VI - Longmans
63. Brueckner's Diagnostic Tests and Remedial Exercises in Reading - Winston
64. Pupils' Own Vocabulary Speller, Bk.6 - MacMillan
65. My Workbook In Spelling, Book 6 - Ginn
70. Essentials of Everyday English Book VII - Clarke Irwin
71. Webster Language Workbooks Grade VII - Longmans
72. Sharp's Useful Language Workbooks Grade VII - Longmans
39. Scottie and His Friends - Moyer

NOTES ON HANDICRAFT PROJECTS

1. (a) Handicrafts or handwork or enterprises may be given to children for several different reasons. When a child has repeatedly met defeat, the first step in his re-establishment is to restore his self confidence. The creation of something concrete, through his own efforts, is one of the quietest and most satisfactory means of bringing pleasure and joy to release the inhibitions created by frustration. For this reason, the first handwork should be chosen with great care. Models quickly made and not requiring too great detail or care are useful. Projects which allow activity as well as satisfy the creative instincts are valuable.

   (b) Handwork is a valuable means of developing muscular control, and co-ordination movements of eye and hand. It is more interesting than continual practising of writing.

   (c) Handicraft may be an excellent introduction to some form of vocational training, even where handwork does not lead directly into some vocation. Ability to use the hands with dexterity, to be precise and neat in tasks, to replace and care for tools and equipment is excellent preparation for work in general field of labour.

(d) Handicraft can form a valuable means of recreation. Types of handwork which can later be carried on in the home environment should be encouraged.

2. Give tracing, colouring, cutting, pasting. The use of a scrapbook would be helpful.

3. Give Preprimer and Primer occupations - plasticene, paper weaving, bead stringing, sewing cards of a very simple type, large perforations.

4. Make a spool knitter (or buy one at a variety store) for giving the pupil repetitive manipulation which he can do. The knitting can be sewn into a circular mat.

5. Give simple basket making on wooden bases.

6. Give coping saw cut-outs with simple outlines. Order coping saw and half dozen blades. Use basswood, 3/8" or 5/8" dressed on both sides, 8" wide. Order approximately 6'.

7. Practical applications of knitting and sewing would be suitable for this pupil - scarf, mitts, pull-over, pot-holder, apron, etc.
(a) order 3 oz. 4-ply wool, 1 pair bone knitting needles #10, more wool as needed;
(b) 1 yard gingham, pattern, needles, thread, etc.

8. Substitute knitting and sewing in the case of girls and woodwork in the case of boys for written exercises in Social Studies and Science.

9. Enterprise work should be stressed for this pupil, particularly work in murals (or large-sized drawings), in model-making and in oral English. The work should be on as large scale as possible and this pupil should be encouraged to contribute in making; (1) cardboard construction; (2) wood models; (3) modelling in such plastics as local clay, salt and flour, asbestos cement, sawdust and flour paste, papier mache, etc.

10. A bird house project is recommended for this boy. Get Extension Circular #10 from the Ontario Agricultural College, Guelph.

11. Make a rake knitter for knitting scarves and togues.

12. Buy a weave. Get it at the variety store for weaving small squares which can be sewn into an afghan.

MATERIALS FOR HANDICRAFTS AND PROJECTS

1. Order sewing cards, paper and oilcloth, weaving mats, one pound of plasticene, a spool knitter and 3 oz. of 4-ply wool from your local store or Moyers or Hendrys.
2. Our First Colouring Book - Eaton's
3. Box of crayons.

4. Order a coping saw, 6 blades, 1 lb. of assorted finishing nails 1" - 2" at a hardware store.
5. Order lumber from the nearest dealer - (a) 5 ft. of basswood or white pine 3/8"x8" D2S and (b) 5 ft. of basswood or white pine 7/8"x8" D2S.
6. Order Lydford's "Junior Draughting", Richardson, Bond & Wright, Owen Sound (60¢).
7. Order Palmer's "Coping Saw Cut Outs" - Gage
8. Order "Things To Make" - School Publishing & Specialty Co.
9. Order 10 ft. of lumber 1" x 8" or 1" x 10" common grade for fold frame.
10. Order 1 pr. bone knitting needles #10; 3 oz. 4-ply beehive wool or similar type, more as needed.
11. Order a knitting book. Teach pupil to follow directions.
12. Order 1 yd. of gingham, pattern, needles, thread. Choose models of interest which will not take too long to complete such as a pot holder or apron.
13. Order materials for a quilt for a child's crib and a simple pattern for embroidering the blocks.
14. Order white cotton and print for patchwork quilt for a child's crib.
15. Order gummed paper and loose-leaf workbook for museum catalogue.
16. Order "Coping Saw Carpentry" - Moyers.
17. A Little Girl's Treasury of Things To Do - Ages 6-9 - The Book Society of Canada, 88 Richmond St., Toronto.
18. A Young Boy's Treasury of Things To Do - Ages 6-9 - The Book Society of Canada, 88 Richmond St., Toronto.
19. A Girl's Treasury of Things To Do - Ages 9-12 - The Book Society of Canada, 88 Richmond St., Toronto.
20. A Boy's Treasury of Things To Do - Ages 9-12 - The Book Society of Canada, 88 Richmond St., Toronto.

Advisement for

Name	Age	Grade	School

Explanatory Note - This is a compilation of suggestions on the training of maladjusted pupils. The paragraphs which are checked appear to be applicable in the case of the pupil whose name appears above. Additional directions may be given under "Examiner's Remarks".

If an opportunity unit be established for this pupil, the school board will receive an annual grant of $5.00 per pupil, if they purchase the necessary supplies and their teacher makes the necessary school adjustments indicated in this advisement. No grant is paid until after an application has been approved by the Inspector of Auxiliary Classes. Forms of application may be obtained from the public or separate school inspector.

Examiner's Remarks

Advisement for

Name	Age	Grade	School

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Examiner's Remarks

N. B.- The appended notes are not intended to be a full treatment of the problems of maladjustment. They are collected here for ready reference and to indicate a few of the things which may be done for pupils. Books are listed on the last page for teachers who may wish to study the question in more detail.

General Notes

1. Mental Hygiene is the study and practice of mental health. Where a person is mentally unhealthy, mental hygiene provides the rules for diagnosis and treatment. This treatment may be medical, psychiatric, psychological, pedagogical or social. In cases where the mental illness is profound and prolonged, the diagnosis and treatment is exclusively the field of medical doctors and psychiatrists. In school and home, the psychologist, the teacher and the parent must diagnose and treat numerous cases of the following types:-

   (a) Unacceptable Behaviour Patterns - Such as cruelty, lying, aggressiveness, stealing, bullying, indecency, exhibitionism and exaggeration, etc.

   (b) Unusual Sensitivity to one Particular Stimulus - such as fear, withdrawing, jealousy, non-cooperation, etc.

   (c) By-Products of Physical Handicaps - fear, withdrawing, jealousy, the invalid's reactions, attention seeking devices, loss of interest, etc.

   (d) Emotional Effects of Physiological Disorders - Epilepsy, St. Vitus Dance, Encephalitis, Cerebral Palsy, Crippling Conditions, Tics, Malnutrition, Visual and Hearing Handicaps, etc.

   (e) By-Products of Frustration - (in School, Work or Social Intercourse) Exhibitionism, tempertantrums, withdrawl, etc.

2. Every person requires for proper mental health:
   (i) a feeling of security (of being worthwhile and of being wanted);
   (ii) a sense of belonging to (a group, a family, a class);
   (iii) a consciousness of success (in terms of the standards of his group).
   (iv) a sense of independence
   (v) a feeling of recognition or social approval
   (vi) a feeling of self esteem
   (vii) a need for change or adventure
   Where one or all of these needs are denied a person, he will attempt to escape from a situation when he finds it intolerable.

3. The general plan for diagnosis and treatment is as follows:-
   (i) The teacher develops an alertness and sensitivity to symptoms of pupil dissatisfaction or maladjustment;
   (ii) A fact-finding survey is conducted to locate the underlying cause or causes of the dissatisfaction;
   (iii) On the basis of the findings from the survey, a plan is invented and tried out;
   (iv) If the first plan does not give the desired results, other plans are tried in succession.

If the cause of dissatisfaction is found in its first stages, the teacher can do preventive teaching. If the dissatisfaction is of long standing, the teacher must plan a corrective programme.

4. (a) The fact-finding survey is for use in diagnosis and includes measurements like the following:

(i) Chronological Age - This is the only precise information which can be obtained.
(ii) Mental Age - By using individual intelligence tests, a mental age can be obtained which is not likely to be more than six months in error except in cases where there is a severe physical, emotional or social handicap.
(iii) Achievement Age or Grade by subjects - This may be obtained by the use of individual or group achievement tests in Reading, Arithmetic, Vocabulary and Spelling. If the results are within 6 months of the mental age, the teacher can place more reliance on the person's mental age, than if you did not obtain these measurements.
(iv) Social Age - This may be obtained by (1) observing the age-group of the pupils with whom this child associates; or (2) checking the social maturity of young children on the Vineland and Social Maturity Scale or (3) administering a personality test.
(v) Physiological Age - This may be obtained by (1) comparing his physical development with that of pupils of his own chronological age; (2) securing medical evidence.
(vi) Emotional Age - This may be found by observing and noting his reactions in the playground at home and in school. Some useful evidence can be found by the use of Personality Scales.

(b) A developmental history should be secured from the parents to show
(i) at what age he walked and talked;
(ii) from what diseases he has suffered during childhood;
(iii) what medical treatment he has had;
(iv) examples of typical behaviour in school or at play;
(v) the existence of defects in speech, hearing, and vision or a crippling or convulsive condition;
(vi) incidents showing the child's reactions to strangers who visited the home;
(vii) details of any accidents which have befallen the child;
(viii) details showing recreation and hobbies.

Note - If this information can be secured by the nurse, it should be used. If the teacher attempts to get it before establishing good relations with the family, she is likely to run into difficulties.

(c) A school history should be prepared to show:-
(i) his regularity or irregularity of promotion;
(ii) his consistently good or poor progress in each subject;
(iii) his school behaviour within the building or on the playground;
(iv) his reaction to previous teachers;
(v) his reactions to various subjects;
(vi) his attendance record.

(d) An evaluation of the home and family life - A knowledge of the home and conditions in the home is necessary. This can best be obtained by paying an actual visit to the parents at a time which is convenient to them. It is sufficient for the teacher to say that he is interested in the child. It is unwise for the teacher to mention any of the child's shortcomings or to ask many questions about the child's behaviour on the first visit. It is a social call of short duration made to establish good relations with the parent and to make observations which should be written down as soon as possible after the visit.

When this information has been collected, the teacher must begin to look for answers to questions like the following:-
(i) At what age did the pupil's dissatisfaction first appear?
(ii) With what incident was it connected?
(iii) How did it develop?
(iv) Can any school book, learning material or teaching method or teacher be associated with the development of a symptom or tendency?
(v) Can any reasonable relationship be established between symptom and the cause?

Questions like those above are necessary before an hypothesis can be made which will explain the development of his maladjustment and offer clues for an adjustment programme which should adhere to the following pattern:-
(i) Introduce a project which appears unique to the pupil and in which he is sure to have success and satisfaction;
(ii) Commence instruction at the pupil's level of achievement in each subject;
(iii) Proceed at his individual rate using materials and methods which have not been connected with his previous failure;
(iv) Keep anecdotal records of significant incidents for guidance in making necessary changes in your plan.

5. The assembling of more precise information is necessary in all cases of maladjustment because a teacher is apt to be wrong if a snap judgment is made or if he extracts all the data from his memory. The teacher must prepare the child for the favourable reception of any plan which has been formulated for the correction or prevention of maladjustment. If the pupil is uninterested and unwilling, the plan will fail because of non-cooperation. On Bullying, you will find a description of the care taken to introduce a project which was interesting to him and gave him a leading place in his own small group.

6. The place of this child in the social relations of his class should be determined. The teacher should know the pupil he admires and the amount of his acceptance by the other members of his group. This can be found by using socrometric techniques.

7. Social Pressure can be used in the classroom as a powerful influence on the behaviour of pupils. It is a weapon which can be used in any direction and may even be used by the pupils against the teacher. It depends on a person's desire to be accepted as a member of the class group in full standing. (An example of its desirable use is given in the case of Refusal to Respond to Adults).

8. When after encouragement, a maladjusted pupil attempts to cooperate with the teacher, the incident should receive favourable notice. Praise for work well done and acknowledgment of effort should be given honestly and without any exaggeration. e.g. Cleanliness - When only a slight attempt at or degree of cleanliness has been shown, it should be noted privately. When it has reached the point where the other pupils are aware of it, some appreciation may be given publicly. The teacher should use every possible means to secure and maintain cleanliness and wholesomeness of body and clothes.

9. In very severe cases of emotional maladjustment, the teacher should try to get the pupil to confide in him. Such confidences should be respected and should never be told or used as a lever to pry further into his thoughts, actions or purposes. The teacher should not believe that the pupil's statements are specifically true because they are an immature person's attempt to rationalize what he has seen, heard, inferred and believed. Confidential notes should be made so that successive stories may be compared. Stories told to the teacher may help him to understand the pupil's problem, and are beneficial to the child's mental health since in talking them out he obtains release from stifling emotion.

10. The Big Brothers and the Big Sisters do a great deal of effective work by acting as "interested third persons". The child who does not react to his parents or to his teachers may accept advice from a person who appears to be really interested in him and acting in the capacity of a very close relative. The "interested third person" may appear to buy his loyalty by taking him on drives, inviting him to his home, conversing with him on the street, going with him to a ball game, or giving him small presents or treats.

    Teachers may be able to secure the services of interested persons who will act as Big Brothers or Big Sisters.

11. Stories of acceptable conduct in certain situations are a useful guide to children. Bravery, charity, endurance, honesty, loyalty, steadfastness, love of country and family and willingness to suffer for a principle were exemplified in the stories found in the early Ontario readers. Teachers are advised to make a reference list of such stories for use in the classroom. (The teacher should be careful not to moralize.)

Suggestions From Teacher's Experiences with Actual Cases

1. Unacceptable Behaviour Patterns

(a) Stealing may be the result of an inability to respect property rights or a wrong means of playing for attention. (1) The care of pets (birds, goldfish, white mice, turtles, etc.) in the classroom has been used as a general plan to create a sense of ownership. (2) In one class, a teacher placed a 10¢ piece on his desk, telling his pupils that he wanted to see how long it would stay there without being stolen. At the end of the first week, it was still there and was good for a few congratulatory remarks. Visitors to the classroom were told at the end of the second week, how honest these pupils were. By the end of the year 60¢ was lying out on the desk in plain sight and the pupils had a virtuous feeling of being able to withstand temptation.

(3) The sense of property values is sometimes developed by collections. General stamp collections are inexpensive. Supplies may be obtained from dealers who advertise regularly in the weekly papers. Stamp catalogues can usually be found in the public libraries of towns and cities if a pupil wishes to ascertain the value of a particular stamp.

(b) Bullying

This is often the result of improperly directed energy in a location where there is insufficient employment of spare time. (insecurity and non-belligerence may develop for the same reasons).

(1) Team games (hockey, football, volley ball, basketball, baseball) are useful if the players are required to adhere to the rules;
(2) The Boy Scout (Girl Guide, Trail Ranger, C. G. I. T.) programme can be used if it is introduced early enough (about age 12). In rural schools or districts, the Lone Scout Programme can be introduced by any teacher. The Lone Scout pays a fee of 50¢ annually and receives a monthly magazine. Where there are four to six Lone Scouts, they may form a Lone Scout Patrol. The teacher secures the instruction book from Boy Scout Headquarters, 57 Bloor W., Toronto, and acts as examiner for the one of more Lone Scouts. A uniform consisting of a kerchief, a code and a scale of achievement can often be substituted for the bullying habit.
(3) Stamp Collecting introduced by means of an Air-Mail Letter bearing a First-Flight Cachet has been used successfully to divert a bully's efforts into more socially acceptable ways. The letter was sent by a school inspector by mail to a post office at one end of a first-flight air-mail run. The letter bore the appropriate stamp and was enclosed with a letter to the postmaster which directed him to despatch it on the appointed day. Eventually the letter was delivered to the boy who read "that the King and others collected stamps; that some stamps were very valuable; that the envelope which enclosed his letter had been carried on the first day of the air-mail service between two cities; that probably no other boy has such a stamp; that there were many special stamps; that if he wished to start he could secure stamps by writing the inspectors; that the drug store sold packages of stamps; etc.

This boy found that he possessed something unique of which other boys were envious. He found it much more pleasurable, profitable and socially acceptable to be the source of information on stamps than to be the school bully.

(c) Cruelty

Sadistic tendencies may develop where the children enjoy inflicting pain on other children or animals. Examples are (1) Tying a tin can to a dog's or cat's tail; (2) Observing the pain reactions of an animal to wounds inflicted with a knife; (3) As a group, chasing or inflicting pain and indignity on another pupil.

This pattern has been changed by some of corporal punishment but more by the following methods:-
(1) Pets were introduced to the classroom first and then into the backyard - (i) Settings of eggs have been hatched and the chickens given to the pupils; (ii) Rabbits, white mice, white rats and guinea pigs have been introduced in this way; (iii) Parents have been persuaded to buy a pup or kitten for a boy or girl.

(2) By popularizing in the classroom stories such as Beautiful Joe and Black Beauty, social pressure has been applied to create a higher standard of conduct;
(3) By introducing Scout or similar programmes;
(4) By organizing a wide sports programme covering all seasons.

(d) Lying

This is a symptom which should not be judged by arbitrary standards. Nearly everyone tells lies. Lying may be (1) a habit or (2) a defense mechanism or (3) a defence of some other person or (4) an exaggeration or (5) a sign of intelligence where the results from truth would be too extreme.

Conditions should be maintained wherein it would be unnecessary to tell lies.

(e) Excessive Giggling

This is frequently found among backward and emotionally unstable pupils. It is a happier response than crying and often is merely a response when a more satisfactory one is not known.

(f) Bed Wetting

This may be due to either physioloical or psychological conditions. It is suggested that parents:

(a) Have child checked by the doctor to eliminate any possibility of physical cause;
(b) Restrict fluids after the evening meal;
(c) Get child up at the parent's bedtime, while doing so be gentle and show affection. The child must not be nagged or embarrassed. He must have a feeling of security.

(g) Nail Biting

Look for some psychological cause.

II. Unusual Sensitivity to One Particular Stimulus

This title was chosen to cover those cases where the reaction appears to be channelled into one type of response. The usual pattern for these is as follows:-
(i) the pupil has had a severe emotional experience accompanied by extreme pain and discomfort;
(ii) both parents or one parent became hysterical during this incident and engendered a feeling of extreme insecurity;
(iii) the pupil has developed by practising it one type of reaction which may be an escape mechanism or a protective device.

Examples are:
(a) Unwillingness to talk to strange adults - A 2½ year old boy sitting on a high chair beside a phonograph put a handful of needles in his mouth. His mother was over severe in clawing them out of his mouth and hurt his tongue. One needle lodged in his gullet. At the hospital, he was required by white-robed adults to swallot a stomach pump in which a strong magnet had been placed. Later, until he was twelve years old, he refused to talk in the presence of strange adults. A school inspector visited his home regularly and got him to respond in signs at first. Later he responded in writing and finally in spoken work

words. Good relations were first established with the parents and brother. The boy was given some cross-word puzzles which he valued as rewards for progress. The main principle followed was to get some kind of response first and to develop that into the desired type of response.

(b) Fear

A child having been bitten by a dog developed the fear reaction of flight to safety which in this case was his parent's arms or shoulders. Screams were the vocal manifestation of fear. He was introduced to a little of puppies, allowed to play with them and finally after several exposures, took one home. As the pup grew, the fear manifestations disappeared.

(c) Defeocation and Micturation

These are fear reactions in which the child is unable to control his elimination mechanisms. The emotional reaction has been unusually severe and can become habitual.

III. By-Products of Physical Handicaps

Childhood illnesses may affect hearing or sight. Loss of hearing may affect speech. These manifestations may in turn affect school progress and result in frustration or conduct which is not typical of the child's age level.

(a) Deafness

A child in kindergarten was considered mentally deficient by his teacher for a period of two year. The deafness was found to be a result of a childhood illness. His intelligence was found to be superior and when he was given instruction suited to the deaf, he learned to speak and read well.

(b) Invalid's Reaction

In any illness which has been severe and the patient has been completely helpless, he may be unwilling to face the fact of his recovery. Over-protectiveness of parents may further delay his recovery. Occupational therapy is useful in these cases. It may start with a game or a puzzle and may develop through scrapbooks to sewing, knitting, leather work and crafts.

IV. By-Products of Physiological Disorders

The invalid's reaction may come from cerebral palsy, poliomyelitis, or any other crippling disease or disorder. The mother may feel that she is essential to the child and be willing to give up this place in his life. The child usually refuses to accept responsibility with the result that his mental, physical, emotional and social development may be inpeded. In the case of a 10-year old who did not talk, his troubles appeared to date from an illness at 2½ years, after he had acquired a considerable stock of words. His adjustment was started by exerting pressure to complete tasks which he had no wish to finish. This was done pleasantly and without corporal punishment. He found it more rewarding and interesting to go through with a daily routine which became more and more complex.

V. By-Products of Frustration In School or Home

(a) Tantrums - These are usually the result of a situation in which the pupil has been given a task beyond his ability. The teacher may be dissatisfied with a child's answer and in his attempts to question the pupil, be surprised at the pupil's show of temper. The most successful treatment is to assign easier tasks.

Emotional outbursts sometimes seem far removed from the actual cause. A girl, having tantrums, swearing and scolding behaviour in school had an upset home with a drunken stepfather who was cruel to her mother said that she has no desire to say or do these things, but she was thinking and wondering how affairs were at home at that minute.

(b) Withdrawal - The most frequently observed type of withdrawal is that where the pupil has learned to wait out the teacher when he asks a wuestion. The pupil has probably been embarrassed by giving an incorrect answer or by failure to satisfy the teacher. He may have found that it is better for him to keep silent and that the teacher would eventually ask someone else. Such a pupil needs success and encouragement.

SOURCE MATERIALS FOR TEACHERS AND PARENTS

I - Pamphlets on Special Problems of Young Children (aged 2 to 5)

1. When a Child Hurts Other Children.
2. When a Child is Destructive.
3. When a Child Uses Bad Language.
4. When a Child Won't Share.
5. When a Child Sucks His Thumb.
6. When a Child Still Wets.
7. When a Child Masturbates.
8. When a Child Has Fears.

New York Committee on Mental Hygiene
of the State Charities Aid Association
105 East 22nd Street, New York 10, N. Y.

Advisement For

Name	Age	Grade	School

Note - This is a compilation of suggestions on the training of a child with a severe visual handicap. Any special directions for this pupil are indicated under "Examiner's Remarks".

Examiner's Remarks

Advisement For

Name	Age	Grade	School

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Examiner's Remarks

Eye Defects Common Among Pupils Admitted to Sight Saving Classes and Units

(1) Albinism - absence of pigment
Aniridia - absence of iris
Astigmatism - irregular refraction
Atrophy - loss of function
Amblyopia - loss of vision
Buphthalmia - glaucoma in a child
Choroiditis - inflammation of the choroid or vascular coat of the eye
Cataract - an opaque formation of the crystalline lens
Congenital Cataract present at birth
Cornea - The transparent anterior part of the eye
Glaucoma - hardening of the eyeball
Hypermetropia - far sightedness
Hypermetropic astigmatism - far sightedness of an irregular character
Hyperopes - far sighted persons
Iris - pigmented membrane behind the cornea perforated by the pupil
Keratitis superficial - inflammation of the surface layers of the cornea
Lens - a lentil-shaped glass for refracting light
Myopia - short sight
Nystagmus - a condition in which the eye is constantly moving
Opthalmus Neonatorum - inflammation of the eyes from infection at birth
Purulent Conjunctivitis - inflammation of conjunctiva with formation of pus
Retina - the innermost tunic and perceptive structure of the eye, formed by the expansion of the optic nerve
Retinitis - inflammation of the retina
Strabismus - squint eye.

(2) Table Showing Percentages of Vision Loss Indicated by the Snellen Fractions

Snellen Fraction		% Efficiency	% Vision Loss
20/20	or 6/6	100	0.0
20/30	6/9	91.5	8.5
20/40	6/12	83.6	16.4
20/50	6/15	76.5	23.5
20/70	6/20	64.0	36.0
20/100	6/30	48.9	51.1
20/200	6/60	20	80.0

(3) The Sight Saving Unit

The Sight Saving Unit is established for partially sighted pupils if they reside in an area where a Sight Saving Class cannot or has not been organized. The teacher of an ordinary classroom undertakes to carry on Sight Saving practices and methods as well as he can. The Board agrees to provide special books and materials for which they receive some help from the Department of Education.

In general, children whose vision range is between 20/200 and 20/70, together with children suffering from progressive eye diseases may be admitted to a Sight Saving Unit. The condition of the pupil's eyes must be reported by a legally qualified oculist or optometrist.

(4) Why a Sight Saving Unit Is Established

The purposes of a Sight Saving Unit are:

(1) to reduce eye-strain and damage to the eye which comes from reading print which is too small; and to prevent the pupil from using his eyes for long periods at a time;

(2) to train the pupil to work in the best possible locations under the best possible lighting conditions and to practise eye hygiene;

(3) to educate pupils who, because of seriously defective vision, cannot be profitably educated if sight saving practices and materials are not used;

(4) to improve conditions which come from glare on paper, desks, blackboard or walls.

(5) How a Sight Saving Unit Is Established

Any school board may establish a Sight Saving Unit for a pupil by making application to the Department of Education. A form will be supplied which when filled in gives the following information:
(1) The name, age, grade, birthday and address and previous education of the child;
(2) The name, address and qualifications of the teacher;
(3) The doctor's or optometrist's recommendations;
(4) The inspector's recommendations;
(5) The signature of the secretary and his official address.

When the application has been approved, the board is eligible for Legislative Grants on equipment expenditures and an Auxiliary Education Grant of $7.00 per year for each pupil.

Application for this equipment grant is made in June on forms supplied by the local inspector of schools.

(6) Equipment for a Sight Saving Unit

(a) Paper

The paper recommended for sight saving classes and units is of a rough finish and a deep cream in colour. It is desirable to have this ruled in lines $\frac{3}{4}$" apart. The lines are usually a light green colour and are printed on the paper by the local printing house. Where printed lines cannot be secured, the necessary lining can be done with a green pencil by pupils whose eyesight is good.

National Stationers whose address is 115 York St., Toronto, supply a paper made specially for sight saving classes. The Gestetner Co. whose address is 117 King St. W., Toronto, have a thinner paper known as Gestetner Special #318 Buff, which is widely used. When the supply of paper is short, the large sheets of drawing paper are a satisfactory substitute.

(b) Writing Tools

(1) Pencils used should be the large kindergarten type with the blackest lead possible. Eagle Veriblack #315 is satisfactory.

(2) Chalk should be a buff or yellowish colour. The sticks should be as large as can be obtained.

(3) Pens should have a broad point. The following makes have been found suitable:

(a) Speedball Pen #4 Style C.
(b) Palmer's Roundline Point Manuscript #2. R.L.
(c) Myer's Roundwriter #4.
(d) William Mitchell's Rex Pen #0904.
(e) Esterbrook's Drawing & Lettering Pen #1.

A very black ink is required. Some sight saving teachers have found that a mixture of half India Ink and half regular school ink answers the needs of the pupils. This reduces the expense and makes a very satisfactory ink. Teachers should experiment with small quantities before mixing up two bottles of ink since some of the modern inks are not ordinary chemical solutions.

Lines are not necessary for blackboard writing and if they are used, the lines should not be white. If lines are desired, they may be placed on the blackboard with black wax crayon. For beginners, lines may be desirable, and if they are needed, they should be placed low on the blackboard to accommodate capitals three inches high and small letters one and one-half inches high.

Writing in sight saving classes comes in for a great deal of discussion. The teachers agree on the following principles:

(1) the work must be legible;
(2) the writing should be simple and of the vertical type;
(3) the stroke should be even in width and without shading;
(4) the letters should fit lines $\frac{3}{4}$" apart.

Typewriting

This subject is not taught as a vocation. The touch method must be used if sight saving is to be practiced. The typewriter may be introduced in Grade 5.

A music holder (or similar gadget) may be used to hold the lesson sheets which should be written (manuscript) out by the teacher.

The instruction may follow any of the standard teaching books. "High School Typewriting" Part I by Rozell and Hewitt (Gregg) is a suitable text.

As soon as the pupil has mastered the keyboard, he may use the typewriter for regular school work. Spelling lessons are usually the first to be taken on the typewriter. The type should be 24 pt. A Gothic type which is large, bold and clear is most satisfactory. A typewriter for bulletins is not satisfactory because it consists of capitals. Typewriter ribbons should always be black and of the variety known as "heavily inked".

(c) Desks

A movable desk or table and chair may be necessary for pupils who are so short-sighted that they can only see the blackboard from a distance of from 2-5 feet. The movable desk may be left at the blackboard for this purpose if the pupil is given the use of another desk. Where desks are at a premium, the movable desk may be placed at will in any place in the room where the lighting is good or at the blackboard.

When a tilt top desk is not used, book rests for the large-sized magnatyped books are advisable. Book rests can be used also when the child is working at a table instead of a desk.

(d) Sight Saving Books

Books in 24-point type are recommended for the use of Sight Saving pupils. If the maximum benefit is to be obtained from a Sight Saving Unit, the pupil should not use any of the regular textbooks or any supplementary reading in print less than 18-point type.

Magnatyped editions of authorized Ontario textbooks are available free of charge for the use of sight saving pupils. They may be secured from year to year by writing to the Inspector of Auxiliary Classes.

The list of magnatyped textbooks is as follows:-
Arithmetic - Grades 3,4,5,6,7 and 8.
Speller, Bk. I - Grades 2,3,4,5 and 6.
Speller, Bk. II - Grades 7, 8 and 9.
Readers - Grades 7 and 8.

Substitute readers are available on loan from the Inspector of Auxiliary Classes as follows:-
About Susan - Primer
Along The Way - Grade 2
Streets and Roads, Level 1 - Grade 3
Times and Places - Grade 4.

Other books may be purchased by the school from the following publishers:-
(a) The Clear Type Publishing Committee, 36 Elston Road, Upper Montclair, N. Jersey, U.S.A.
(b) Stanwix House, 702 Berger Bldg., 401 Grant St., Pittsburgh 19, Penn.

Another source of books in large type are the TRADE BOOKS. These books are published in large quantities, and sold to book departments of large stores. Useful books may be found on these book counters.

(7) Classroom Conditions Necessary In A Sight Saving Programme

Lighting

The pupil should work in a location where the illumination is not less than fifteen (15) foot candles. Thirty (30) foot candles is considered desirable.

There should be no glare resulting from uncovered bulbs and glossy reflecting surfaces (such as shiny blackboards, polished desks, glossy paper and paint).

Classroom decorations should not be such as to reduce the normal amount of natural illumination.

Translucent blinds should be installed for the purpose of reducing the effects of strong sunlight.

Seating

The pupil should sit in the second row from the window in the second front seat. Where the front desk is more than eight feet from the blackboard, the pupil should sit in the front desk or should have a movable desk placed not more than 10 feet from the blackboard.

No partially sighted pupil should have to face a window. In cases where a window may be partially or wholly visible, it should be effectively screened.

Paint and Varnish

Flat paint on the walls and ceiling and dull varnish on the furniture should be the rule. The ceiling should be white and the walls buff, soft green or French gray.

If the desk is highly varnished, some improvement can be obtained by using a light blue or light green blotter to cover the desk surface. Cover paper in large sheets will last longer than blotting paper.

(8) Eye Hygiene

The teacher should instruct the sight saving pupils on how to take care of their eyes. The child should not be allowed to become morbid on the subject of eyesight. They should not discuss eyesight problems with other pupils. Sight saving pupils should be taught to recognize their special limitations in the use of their eyes; to see the necessity for straight clean glasses; to be so conscious of light and lighting that they will always seek the best possible position for doing any reading, writing or close work; and to use the eyes for appropriate periods.

The teacher should take every opportunity to study eyes and to recognize from oculists' reports just what difficulty the sight saving pupil is facing.

(9) Art, Handwork and Enterprise Work

Sewing and weaving have been abandoned as handwork in sight saving classes because the pupils at every opportunity use their eyes instead of the sense of touch. Basketry is defended on the ground that the child gains pleasure and some training, although it is not directly useful.

Spatter work or spray painting or blue printing of leaves, flowers and small branches are interesting projects and quite easy on the eyes.

Knitting may be taken by both boys and girls if large coloured needles and wool of a contrasting colour are used. The child should not be allowed to work at it for too long a period. Once learned, the action becomes automatic and the child has acquired a useful skill.

In Physical Training, Folk Dancing seems to be of particular value to sight saving pupils. It helps to remove awkwardness and is less danger to glasses than most other games.

No handwork should be given simply to keep the child busy while other grades are reciting. The sand table can be used to advantage if it always contains some project in the process of development. It should not be just an educational plaything.

Large murals and posters are recommended. These should be on a very large scale and should not contain much detail.

Coping saw work may be used if the pupils follow a heavy black pencil line. Draughting should not be given. The girls in a sight saving class or unit should take cooking and should write recipes in India Ink on wide-lined paper. The sheets can be bound into a notebook.

Rake knitting with rug wool in bright colours has been used successfully. Weave-it Frames are satisfactory for use with sight saving pupils if the manufactured circular materials are used.

(10) Reference Books which may be borrowed from the Auxiliary Education Branch.

Fox - Your Eyes
Merrill and Oaks - Your Vision and How To Keep It
Hathaway - The Education and Health of the Partially Seeing Child

Advisement For

Name	Age	Grade	School

Note - This is a compilation of suggestions on the training of children who have Defective Hearing. Additional directions may be given under "Examiner's Remarks".

Examiner's Remarks

The establishment of a Speech Correction Unit is (not) advised. Where an inspector recommends it, a grant of $5.00 per pupil will be paid if adequate supplies are provided and the teacher gives at least two lessons per week. (See Regulations Auxiliary Classes).

Advisement For

Name	Age	Grade	School

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Examiner's Remarks

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General Notes

1. The following symptoms are indications that a child may be hard-of-hearing:-

   (a) the omission of endings of words such as "s", "t", "d";
   (b) speaking in a low-pitched or high-pitched or monotonous voice;
   (c) the substitution or omission of letter-sounds within words;
   (d) poor spelling;
   (e) asking the teacher to repeat directions;
   (f) refusal to speak in school;
   (g) loss of interest in class discussions;
   (h) turning head toward the speaker;
   (i) day dreaming;
   (j) inattention;
   (k) puzzled expression.

2. The following diseases may have an adverse effect on hearing:- Scarlet Fever - Diphtheria - Measles - Mumps - Pneumonia - Influenza - Rheumatism - Chorea - Chicken Pox - Convulsions - Whooping Cough - Meningitis - Tonsilitis - Mastoiditis - Sinusitis. The teacher should find out what diseases the pupil has had in order to relate the symptoms to a possible cause.

3. The educational diagnosis of hearing defect is necessary in order to lay plans for training the pupil in techniques which will (1) improve his ability to talk and (2) improve his ability to understand the speech of other persons. The hard-of-hearing pupil may need both Speech Correction and Lip Reading.

   Medical diagnosis is necessary in order to decide (1) whether treatment will cure the condition; (2) the usefulness of mechanical hearing aids; (3) whether or not the condition is progressive; and (4) the type of training which should be given.

4. A rough test which indicates that a person is hard-of-hearing is his inability to hear words whispered at 6 feet. Voice, audiometric and other tests should be given before any plan of instruction is made.

5. For lip reading and speech correction, the use of a mirror is strongly recommended. The mirror should be large enough to allow both teacher and pupil to see the other at the same time. The teacher demonstrates the correct form of the speech sound and the pupil copies it. The pupil is trained to watch his own lip movements, jaw movements, and if possible, tongue movements.

6. Audiometric measurements are stated in decibels. A decibel is a unit of measurement of sound intensity as perceived by the human ear. Hearing defects can be classed as moderate, moderately severe and severe. The pure-tone audiometer is calibrated to show above normal hearing from 0 to 10 decibels and hearing losses from 0 to 100 decibels.

7. Hard-of-Hearing children are those who have moderate deafness and some of those who are classified as moderately severe. Such a child, while hearing imperfectly, may speak well, particularly if he heard perfectly during the time he learned to talk. Children who speak well may need much training in lip-reading and little speech correction. Others may need a great deal of speech correction and lip reading. The teacher should note whether speech was acquired before or after the onset of deafness.

8. Hearing aids should be used if they help the child to hear. Every method or instrument which makes it easier for the child to hear should be used only on the advice of an otologist who is a medical specialist in hearing.

9. All pupils who are deaf or hard-of-hearing should be examined by an otologist who will determine the kind and degree of deafness. When this has been discovered, the proper kind of hearing aid may be chosen and the necessary training can be begun. For school authorities or parents who are within easy distance of Toronto, The National Society for the Deaf and Hard-of-Hearing, 3 Bloor Street East, Toronto, can assist in arranging appointments with otologists in all parts of the province.

10. Pupils who are classed as severely deaf (having no hearing of speech sounds, and consequently have limited speech) should attend the Ontario School for the Deaf, Belleville. An examination by the Superintendent must be administered before admission. For further information, write Mr. W. J. Morrison, Superintendent, Ontario School for the Deaf, Belleville.

11. Some success has been obtained by using a class hearing aid wired for one pupil in a regular classroom. Such installations cost from $100 to $150.00, and should not be confused with an individual portable hearing aid. The installation is such that it may be moved from room to room with the pupil as he is promoted. Its use has resulted in improved tone qualities in the pupil's speech and a normally pitched voice.

12. An audiometric examination may reveal that a pupil suspected of deafness is neither deaf nor hard-of-hearing. The assumption must be that he has not been attending. Ear-training and listening exercises are recommended in such cases. Hearing is also variable and influenced by season and health.

13. Children who are hard-of-hearing should be seated in one of the two seats nearest the front in the second row from the window, in cases where the right ear is the better one. This location places the child near the teacher where he can watch the teacher's lips and be near enough to gain the maximum benefit of the sound of the teacher's voice. In dictating spelling, in asking questions, in reading and speaking to the class in which there is one hard-of-hearing pupil, the teacher should stand so that on a full view of her face there are no shadows. This means that the teacher must not stand between the pupil and the source of light. The child should be encouraged to watch other pupils when they reply to questions.

14. Some pupils who are hard-of-hearing require speech correction exercises and lip-reading exercises. Lip-reading training requires a great deal of use of a mirror. Formal exercises in lip-reading may be found in a separate section of "Training Handicapped Children." Informal exercises include all situations in which speech is used and in particular the regular period for spelling.

The hard-of-hearing pupil may have a slight loss of hearing and may miss a few specific sounds or he may have a severe hearing loss which may involve many sounds. The sibilants "s, sh, th, of" are high-frequency sounds. The explosives "p, b, and g, etc." are examples of middle-frequency range. This accounts for the partially deaf person missing the endings "s, t, d, etc." and the quite deaf person say "ow, ah, oo" for "How are you?".

15. The social adequacy depends to a large extent on the area or frequencies where the loss in hearing occurs.

16. The following books are recommended to guide the teacher in Lip Reading and Speech Correction lessons -
(a) New Aids and Materials For Teaching Lip Reading - Volta Bureau, 1537 35th Street N.W., Washington, D.C.

(b) Steps In Speech Training - Teachers Book -
Step 1 - For children 7-8 years
2 - For children 8-9 years
3 - For children 9-10 years
4 - For children 10-11 years
5 - For children 11-12 years
Clarke Irwin and Oxford.

17. Ear Training or Listening Lessons are described in Steps In Speech Training, Teachers Book II - Clarke Irwin and Oxford, Amen House, University Avenue, Toronto.

18. The following books may be borrowed from the Special Class Library in the Auxiliary Education Branch.
(a) Brentano - Ways To Better Hearing.
(b) Bunger - Speech Reading, Jena Method - Danville, Illinois, Interstate, 1944.
(c) Bruhn - The Muller-Walle Method of Lip Reading for the Hard-of-Hearing - M.H. Leavis, Boston 15, Mass.
(d) Goldstein - The Acoustic Method - St. Louis, Laryngoscope Press, 1939.
(e) Ewing and Ewing - The Handicap of Deafness, Toronto, Longmans Green, 1946.

Advisement For

Name	Age	Grade	School

Explanatory Note

This is a compilation of suggestions for giving training to children who stutter.

Any special suggestions for this pupil are indicated under Examiner's Remarks.

Examiner's Remarks

The establishment of a Speech Correction Unit is (not) recommended. Where an inspector recommends it, a grant of $5.00 per pupil will be paid annually if adequate teaching and learning materials are provided and the teacher gives at least two lessons per week. (See Regulations Auxiliary Classes).

1. General Notes

Stuttering is halting defective speech which is characterized by retardations, repetitions, accelerations, prolongations or arythmical grouping of words. The stutterer has difficulty in producing sounds or words. The difficulty may come at any part of a word or phrase or appear between words. Stuttering is sometimes accompanied by spasms, contortions and emotional strain.

The examples given below are classified according to the distinguishing features of each:

Stutter - A person is said to stutter when his speech is marked by:

(1) retardations, e.g. - Uncle John ----(pause for a struggle to utter the next sound unit) ---- had lived on ---- (similar pause) ---- the frontier while a (similar pause) ---- grew to maturity.

(2) repetitions, e.g. - M-m-m-m-m-ary had a l-l-l-l-l-little d-d-doll.

(3) accelerations, e.g. One day they ---- (pause) ---- went all the way to the ---- lake. (The words are jerked out in groups.)

(4) prolongations, e.g. Fffffather ssssays ththththat nnnnnnnumerous cccccomplaints.

(5) the use of starters, e.g. (a) Ah-ah-ah-It was quite late ---- ah.
(b) (And) Aunt Mary ---- (now) told John and Mary, (and, and) ---- that after the ship ---- (and) left the harbour.

(6) Arythmical grouping or phrasing, e.g. John has wh/ ---- white rat. It has bright eyes, fine/ ---- hair, small/ ---- ears and a/ ---- long tail.

The peculiarities of the stutterer's speech may be associated with physical and mental conditions. Muscular cramps or spasms of the diaphragm, larynx, soft palate, tongue or lips may occur. The pupil may have a fear of using his voice before the class, before strangers, over the telephone or any audience situation. This fear may appear to involve particular sounds, words or phrases. The pupil may have feelings of inferiority and over-anxiety and may exhibit neurotic symptoms.

2. Hygiene of Stuttering

In the home

The usual hygiene as regards food, bathing and sleeping should be observed. Ten hours of sleep are recommended for every child who has any co-ordinational difficulties. If the child has bad sleeping habits, they should be corrected. The stutterer should always sleep alone and should never sleep in a room with the opposite sex. Coffee and tea should not be taken. Guidance should be given to avoid any attacks of excitement and depression and he should not be allowed to be too boisterous and gay if corresponding amount of depression seems to follow.

Conditions which put the child stutterer under pressure to use speech should be avoided. No stutterer should be discouraged by his contacts with life to the extent that he plays alone or day dreams or replaces his interest in real life with an interest in books. The child also should never be put in a position when he cannot talk freely.

Nagging of any kind or description must be avoided. The parent must find other means of obtaining the proper responses.

If the child's general co-ordinations are exceedingly faulty, he may drop books, tear his clothes, slam doors and break china. In such cases, he should be given as much latitude as possible and the oppor tunity for developing muscular co-ordination in group games and in doing outside chores and messages.

The stutterer who is left-handed sometimes has difficulties with door knobs or the conventional placement of the knife and fork. The reports of Sacks and Scripture et al show that when the use of the preferred hand is interfered with, there are evil results.

The rhythm of the stutterer's speech is lacking to a great degree. For this reason, swimming, dancing and singing are recommended for their effect on rhythmical breathing and control of the diaphragm. This is particularly true if abdominal and diaphragmatic cramps occur in stuttering.

In the school

Much of what has been said in the section "In the home" is true for school conditions. The teacher should attempt to help the parents by observing the child in the home. If an invitation to dinner will create a formal situation, it would be better omitted. A normal child can develop a very adverse emotional reaction to a teacher who fails to appreciate his pets, possessions or achievements. In the case of a stutterer, these reactions may be more severe. Any suggestions made to a parent should be made at a time when the child is not present. Where the parent will quote the teacher to the child, the teacher's suggestions may aggravate the situation. It would be better to give no advice where the child will be victimized, threatened, coaxed, cajoled or persuaded in your name by either parent.

The stutterer must be treated with the utmost in successful diplomacy and consideration. The teacher has a great power over his emotional life and happiness and should not laugh at him or permit other pupils to do so. Continual repetition of questions or correction may destroy the pupil's trust in the teacher.

Nearly all persons stutter occasionally. It may occur when the speaker is tired, or confronted by a large audience. Some people are robbed of the power of speech in the audience situation. Others when trying to use very careful language or when thoughts do not come easily will find themselves stuttering. Any of these conditions aggravated beyond the normal stage may become pathological and is called stuttering.

If the teacher notes that the stutterer has a monotonous voice to a degree that he does not have approximately normal inflection this is not to be confused with the voice in song which is known as a monotone. Training for flexibility should be given with a view to modifying the condition.

The most helpful management of the stutterer includes the use of all known aids for the stabilization of the spirit, soul, mind and body of any human being. The methods for each individual case vary in relation to the individual needs.

3. Relaxation

Examiners note that the stutterer tenses his muscles and must be taught relaxation and control. Nearly all speech lessons are preceded by some exercises which tend to loosen any tense muscles. All books on speech correction give details of relaxation exercises. Others may be found by checking over the quiet rhythmic exercises in a Physical Training Manual. The following are given as examples of those actually used.

(a) Physical exercises for relaxation:

(1) Head rolling. Let the head drop forward and roll easily on its own weight from side to side.

(2) Roll the shoulders backwards and forwards with ease and looseness.

(3) Rag Doll Exercise - Hold whole body as loosely as possible. Arms limp at the side. Shake head, arms and whole body loosely.

(4) Standing erect, balance on the balls of the feet and spring easily up and down, raising the heels.

(b) Relaxation Technique:

A simple method is as follows:-

(1) With the pupil lying on his back on a flat couch (or table) ask him to tighten, strain and flex all muscles as much as he can. When this has been done, get him to raise his hips off the couch and rest his weight on his heels and his shoulders. (This is to arch the back.)

Relaxation can be brought about by building up self-confidence and a feeling of "I can do it".

(2) Reverse this condition by saying "Now do the opposite in everything. Let yourself down and loosen your muscles as much as you can."

(3) "Yawn as wide as possible."

(4) "Close your eyes and try to see the colour of a bright blue sky."

When the pupil's arm is perfectly limp he is usually relaxed. In this condition, the six cases of stuttering (the only six cases thus far tried) were able to answer questions normally and do such other things as count to fifty and repeat memory work. It demonstrates to the pupil that he can talk naturally.

This relaxed state should be maintained for at least a few minutes during which time the pupil should visualize himself talking without stammering, winning races, or visualizing other activities.

After the pupil achieves relaxation, try exercises which seem useful in the individual case.

4. Breathing in Speech

Breathing exercises may serve to relax the pupil and to develop better control of breathing while speaking. (Breathing is normally an involuntary movement. Therefore, it cannot consciously be controlled, except when it becomes voluntary during speech attempts. This means we must train breathing and speech together, improving both at the same time.)

1. Stand erect and inhale through the nose gently and easily. Exhale through the nose keeping an even breath stream. Repeat and exhale through the lips.

2. With hands on hips, (fingers forward at the base of the ribs), draw the breath in quickly through the mouth as if startled or frightened.

3. Inhale through the nose and hold the breath while thinking the count of five. To the same count, exhale through the nose. Repeat and exhale through the lips.

4. Inhale slowly as you raise the arms forward to the level of the shoulders. Hold arms outstretched and retain the breath while counting five mentally. Drop the arms gradually while exhaling slowly to the mental count of eight. Repeat raising the arms outward to shoulder level.

5. Inhale and exhale alternately as in panting. Do this rhythmically. First to a slow count and then to a quick count.

6. Take slowly a deep breath through the mouth. Exhale through rounded lips slowly while blowing on a thin strip of paper held in front of the mouth. See how steadily the air stream can be controlled.

5. Methods of Re-educating Stutterers

The first step in any method is to secure data showing as completely as possible, the physiological, physical, psychological and educational development of the child. All information possible should be collected because there are so many possible courses.

The following are methods which have been used successfully:

1. Concert Reading with a Pupil or an Adult.

(a) The teacher reads orally, stressing slow speech and phrasing, the first paragraph from the reader with the pupil. In the second paragraph, the teacher lowers the voice or whispers. In the third or subsequent paragraph, the teacher allows the pupil to read a sentence or more alone.

(b) In the regular classwork, two pupils read orally in concert. In some cases, the stuttering pupil makes one of the pair of readers. The teacher should not use this device exclusively for the stutterer.

2. Distraction with Hetero-Suggestion.

Convey to the pupil the idea that the exercises will probably help and possibly control his difficulty. Then use some of the following devices to distract his attention from his customary stammer and to build up his confidence.

(a) Have the pupil practise talking in time (and breathing in time) to the bell of a metronome set to ring at every fourth beat,-

(i) uttering one syllable at a time.
(ii) uttering one word at a time.
(iii) uttering one word-group at a time.

(b) Have the pupil practise talking while he varies the pitch of his voice in accordance with some specified melody pattern.

(c) Have the pupil practise talking while he varies the volume of his voice in an arbitrarily specified manner. Have the pupil, for example, whisper one word, say the next in a normal voice, then shout the next, etc.

(d) Have the pupil practise breath-grouping his utterances in novel ways (e.g. - one word in the first breath group, two in the second, three in the third, four in the fourth, one in the next, etc.)

(e) Have the pupil practise summoning up a vivid visual or auditory image to accompany each word he utters.

(f) Have the pupil relax all the muscles of his body before speaking and then supplement this by easy, rhythmic breathing during speech.

Do not direct a question suddenly to any stutterer. Reverse the usual pedagogical procedure by naming the pupil before asking the question. This will give him an opportunity to prepare his answer.

When a stutterer exhibits some difficulty in responding to questions, the teacher should give him as much help as is possible by adapting questions to the pupil's needs.

When speech responses are very difficult, the child's need to answer may be aided by phrasing the question to permit him to write his response on the blackboard. e.g. "John, write on the board, the year in which Columbus discovered America." It is important that the teacher cultivate the pupil's desire to answer.

Questions can be phrased to require a one-word answer. Opportunities should be made to expand one word answers into two or three words when it appears that the pupil will be successful. Examples are:-

(1) What is the capital city of Canada? (Ottawa)
(2) How do you express 75¢ as a fraction of a dollar? (Three-quarters)
(3) Tell me another way to express 3.45 p.m.? (a quarter to four)

Books

1. Burt - The Backward Child - pp. 270-369
Clarke Irwin and Oxford Press

2. Lassers - How Teachers and Parents Can Help Prevent Stuttering
State Department of Education, Salem Oregon.

3. Heltman - First Aids For Stutterers
Boston, Expression Co., 1943.

Advisement For

Name	Age	Grade	School

Explanatory Note

This is a compilation of suggestions for training children with speech defects. Any special suggestions for this pupil are indicated under Examiner's Remarks.

Examiner's Remarks

The establishment of a Speech Correction Unit is (not) advised. Where an inspector recommends it, a grant of $5.00 per pupil will be paid annually, if adequate teaching and learning materials are provided and the teacher gives at least two lessons per week. (See Regulations Auxiliary Classes)

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General Notes - Section I

1. The first step in a programme of speech correction is to list the sounds which are substituted or omitted. Some of the substitutions have been listed by the examiner. You will likely find others.

2. The main method of teaching a pupil with defective speech is imitation. Short lessons of 3-5 minutes each should be given every day to build up the new speech patterns. The teacher demonstrates the correct speech pattern and the pupil copies it. The teacher also chooses words and sentences for practice. Reference books for practice material are indicated at the end of Section I.

3. For initial steps in speech correction, the use of a mirror is strongly recommended. The mirror should be large enough to allow both teacher and pupil to see each other at the same time. The teacher demonstrates the correct form of the speech sound and the pupil copies it. The pupil is trained to watch his own lip movements, jaw movements, and if possible, tongue movements. Some cases respond readily to this simple treatment and after a few month's practice, overcome a habit of long standing.

4. In difficult cases, it may be necessary to supplement the training by giving tongue, jaw and lip exercises as described in "Steps In Speech Training". The pictures in this book are a very useful aid to both teacher and pupil.

5. Tact and diplomacy are necessary in introducing speech correction or lip reading exercises. The first lessons should be given to the whole class or else privately conducted, probably during an intermission. If eventually, the teacher conducts speech lessons when school is in session, it should be at the back of the schoolroom, and as much as possible out of public view.

6. In choosing particular substitutions on which to start a course of training in speech correction, the teacher would do well to practice all the sounds needed privately in front of a mirror to decide which of the pupil's errors can be demonstrated most easily and most efficiently. The sound which the child can imitate successfully could be the first one on which to start. The sounds "l" "sh" and the vowels are good examples as they can be easily demonstrated. Sibilants require the emission of air through the lips or teeth. The air stream can be demonstrated by blowing on the back of the hand, a candle or a pin-wheel.

7. The teacher is referred particularly to the books "Steps In Speech Training" or "Training Handicapped Children" or both for words, sentences, rhymes and verses which are rich in examples of a particular sound. These should be looked up before the beginning of a new lesson. Other books are listed for further reference.

8. The case of a stutterer should be studied carefully. Relaxation exercises, two pupils reading in concert to pace the stutterer and rhythmic exercises with or without a metronome are useful. For further information on Stuttering, the teacher is referred to the following books -
   (a) Burt - The Backward Child - pp. 270-369
   (b) Heltman - First Aids for Stutterers
   (c) Lassers - How Parents and Teachers Can Help Prevent Stuttering.

9. A lateral lisp occurs when the tongue takes the position for the sound "l" and the air escapes sideways into the cheeks and at the corners of the lips, instead of through the grooved tongue against the centre of the upper teeth.

10. Directions for Handkerchief Drill are given in "Steps In Speech Training". In rural schools, this may be given to all pupils or to a group which includes the pupil who needs speech correction. (Care should be taken in giving this drill. Children should not blow hard when the mouth is closed as air may be forced into the air passages.) The mouth should be partly open.

11. In cases where there are omissions of letters, the child may be hard-of-hearing to a slight or great degree. This may possibly be checked by giving a whisper test at 20 feet. If the child fails on a whisper test, an audiometric test should be given.

12. Ear-training exercises are recommended as described in "Steps In Speech Training" under the heading "Listening" in the teacher's notes on individual lessons. For pupils who, because of inattention, maturation, or faulty hearing, are unable to distinguish final "s, t, d, ing and y," exercises for ear training should be given. Another exercise is to sound audibly, sound by sound, the letters of short phonic words and require the pupils to synthesize the sounds into a word. Long words given audibly, syllable by syllable are another form of ear training. Words exceeding four or five sound units usually baffle pupils in the early stages of such training. This may be due to stress on analysis of words without enough practice in synthesis to balance their performance.

13. In this advisement, all speech defects are called letter substitutions or omissions. The stutter is a special defect not included in this advisement. Baby talk, retarded speech, nasal speech, spastic speech, dental lisp, lateral lisp, cleft palate speech, foreign speech, and articulatory defects are names given to letter substitutions or omissions which come from different causes. Cleft palate speech training requires great care.

14. Special directions included in this advisement are given for correcting lispers and cleft palate speech, and for the production of the speech sound "R".

BOOKS

1. Abney-Miniace - This Way To Better Speech - Gage
2. Amoss and DeLaporte - Training Handicapped Children - Ryerson
3. Barrows and Hall - Games and Jingles For Speech Development - Copp Clark
4. Lloyd, M. Pearl - Our First Speech Book - Thos. Nelson
5. McAllister - Steps In Speech Training - Step I, Teacher's Edition Clarke Irwin (for children 7-8 years.)
6. McAllister - Steps In Speech Training - Step II, Teacher's Edition Clarke Irwin (for children 8-9 years.)
7. McAllister - Steps In Speech Training - Step III, Teacher's Edition Clarke Irwin (for children 9-10 years.)
8. McAllister - Steps In Speech Training - Step IV, Teacher's Edition Clarke Irwin (for children 10-11 years.)

9. McAllister - Steps In Speech Training - Step V, Teacher's Edition Clarke Irwin (for children 11-12 years.)
10. McAllister - The Primary Teacher's Guide To Speech Training - Clarke Irwin
11. A mirror about 8x12", and much larger if possible should be supplied. After initial stages are passed, the pupil may use a small hand mirror or a discarded mirror from a lady's purse.

The following books can be borrowed from the Auxiliary Education Branch Library:-

1. Berry and Eisenson - The Defective In Speech - New York - Crofts and Co., 1945.
2. Barrows and Pierce - The Voice and How To Use It
3. Cottrel and Halsted - Class Lessons For Improving Speech - Boston, Expression Co., 1936.
4. Van Riper - Speech Correction - New York, Prentice Hall, 1944.
5. Nemoy and Davis - Correction of Defective Consonant Sounds - Boston, Expression Co., 1937.
6. West, Kennedy and Carr - The Rehabilitation of Speech - New York, Harper and Brothers, 1937.

Section II - THE PRODUCTION OF SPEECH SOUND "R" - by Elizabeth Bowling

The sound "r" appears rather late in the production of speech sounds. It should be called a defect if the child cannot produce it at six or seven years of age.

There are various pronunciations of the consonant "r". "R" is produced in the initial and middle positions and in final positions when the next word begins with a vowel. Final "r" is produced as a vowel sound in English "ar", "er", "ir" or "ur". Final "r" is produced in some localities, as in the United States, and often in Canada. Final "r", when pronounced, is modified in comparison with initial "r".

The rolled "r" is pronounced with sides of tongue raised and tip free. The fricative "r" is made with point of tongue near the gum behind upper teeth, and sometimes reduced to single tap of tongue, tip slightly turned back. Lips should be relaxed.

Fricative "r" is more easily taught, especially to deaf children.

Substitutions made for "r" sound are: "w" for "r" where lips are used instead of tongue; "l" for "r" when the back of tongue is dropped too low; "y" for "r" when tongue is raised to "ee" position.

Faulty Production and Methods of Correction

(1) Lips too far advanced - for correction use mirror to see position of tongue. To get position of tongue review sounds "t", "d", "n", "z" - use with all vowels forming syllables - "tah", "dah", "nah", "zah", etc. If difficulty persists in production try from "z" sound - buzz a "z" strongly. Repeat "z" sound with tip of tongue turned back - weaken "z" sound until "r" is recognized - "zah-rah", "zay-rai", "zee-ree", "zeh-reh", "zoo-roo", etc. Again obtain "r" from the voiced "th" - place the tongue behind opening between teeth as for "th" with lips spread, then allow tongue to slip up to position behind upper teeth. Compare syllables with "th" and "r".

(2) Tongue may be curled back too far - to correct, work from the voiced "th" and "g". Use syllables, then words containing syllables - "ex", "they", "ray", "rain", "raise", "rake", etc.

(3) Practice "r" in combination - "thr", "fr", "pr", "tr", etc:
   (1) by imitation - imitate play sounds, such as sound produced by frog, growl of dog or lion - grr.
   (2) use in syllables, and nonsense verses, establish new habit.
   (3) return to familiar words and establish easy use by practice, until it takes its place naturally and automatically.

Remember any association with words will produce the customary reaction and the sound hitherto used will persist - therefore, the use of syllables for drill.

It may be necessary to approach the new sound through another which bears some relation in position or point of production to it.

CORRECTING CLEFT PALATE SPEECH - by Ida C. Ward

The teacher will need to use all his ingenuity and all his phonetic knowledge to invent a sufficient variety of exercises so that the pupil, especially the young one, does not grow tired of the necessary effort.

(1) The first object is to try and guide the air stream to pass out of the mouth instead of through the nose. Place a piece of cardboard horizontally below the pupil's lower lip, then put a feather on it and tell him to blow it away. To ascertain whether the breath is coming through the nose or the mouth, place one piece of cardboard below the nostrils and one below the lower lip, put a feather on each and tell the child to blow the bottom one and not the top; if the bottom feather moves it must be due to the breath from the mouth. Other exercises in blowing through the mouth; blowing thin paper flags, bubbles, playing a mouth organ, shooting peas through a pea-shooter, whistling, etc.

(2) Draw in breath quickly through the mouth, with closed rounded lips. The yawn position, in which the velum is drawn up and back of the muscles behind it, will strengthen the movement of the palate, and whistling is an excellent exercise.

(3) The pupil should practise holding his breath. At first he will not be able to hold it, but after a little practice he should be able to hold it while the teacher counts twelve or more.

(4) The pupil should be asked to look at the teacher's soft palate, watch its movements and try to imitate them, looking in a glass at his own palate.

(5) At this stage, the correct positions of the organs of speech for the explosives can be taught. 'p' and 'b' are the easiest, as the lip positions can be readily seen and felt. The pupil should close his lips and hold the stop of 'p' for a second or two, and then open them suddenly and try to make an explosion there. He can be told to try to puff his feather away in this manner.

In all these exercises, the teacher must ensure that the breath comes as much as possible through the mouth; test occasionally with a mirror under the nostrils to see if any breath is coming through the nose.

(6) When the patient has obtained a certain amount of control of the soft palate, and can raise it to touch the wall of the pharynx, he should be able to make all the vowel sounds without nasal resonance. Singing exercises are of value in strengthening the movement of the palate. Let the pupil sing the scale to various vowel sounds; let him sing "a" on a low note and then go straight to a note an octave higher.

CORRECTING LISPERS

Lisping may be -

(1) infantile lisping substitutions 'th' for 's', 'z', 'ch', 'j', 'x';
(2) lateral lisping where the tongue takes 'l' position and allows air to escape sideways into cheeks and at corners of lips - instead of through grooved tongue against centre of upper teeth.

Causes may be -

(1) infantile habits - relatives thinking a lisp 'cute';
(2) carelessness during dentition - becomes a habit;
(3) mechanical lisping, occurs when dental arch, teeth or jaws are malformed. It requires intelligent effort in choosing position of tongue to produce best results.

Training -

(1) train ear to hear and recognize sound;
(2) study position of tongue - give tongue exercises;
(3) for lateral emission, give exercises to strengthen muscles of throat and tongue.

Key No. 8B - Limited Learners

Advisement for

Name	Age	Grade	School

Note - This is a compilation of suggestions for the education of a child with very limited learning abilities. Any special suggestions for this pupil are written under Examiner's Remarks.

EXAMINER'S REMARKS

Key No. 8B - Limited Learners

Advisement for

Name	Age	Grade	School

Note - This is a compilation of suggestions for the education of a child with very limited learning abilities. Any special suggestions for this pupil are written under Examiner's Remarks.

EXAMINER'S REMARKS

GENERAL NOTES

1. The term "limited learners" is used to describe all children who are unready for school at the usual age of five and who probably will not progress to the academic level of the average Grade Three pupil by the time they are sixteen years of age. These children can learn a great many things which will make life much better for themselves, their parents and their neighbours. Their training must be individual since they are not ready for instruction in large class groups. This training should be attempted to promote their social development and to discover if their backwardness is due to some undiscovered defect.

2. The child who is ready for school can do most, if not all, of the following things:- (1) Copy and match simple forms; (2) Fold paper; (3) Count more than three or four things; (4) Name common articles and repeat short sentences; (5) Play cooperatively with other children; (6) Follow directions; (7) Recognize primary colours; (8) Make his needs known; (9) Remember happenings of the previous day or hour; (10) Dress himself and care for his toilet needs; (11) Comprehend situations described to him in words; and (12) Reply to questions within his experiences.

The child who cannot do all or most of these things does not react well to group teaching and is out of place in regular class. His behaviour in school may be marked by tantrums or refusal to respond or inability to follow school rules. Some of the more noticeable difficulties have been listed here to show parents some of the things which the limited learner should attempt to learn.

3. The parents of limited learners should have sought expert advice on the child's physical and mental growth. If this has not been done, they can secure expert advice from the Mental Hygiene Clinics maintained by the Provincial Department of Health. The family doctor can make arrangements for the child to be examined at a Mental Hygiene Clinic.

Before planning a course of home-training for the child, the parent should know the following:

(1) Whether or not there is any defect of sight or hearing;
(2) Whether or not the condition comes from glandular deficiencies;
(3) Whether or not there is brain or nerve injury or epilepsy;
and (4) The degree of physical or mental maturation.

4. The pre-school child learns to talk by imitating his parents' speech. Dressing, playing, feeding habits and manners are also learned by imitation. These patterns are impressed and re-inforced by practice.

Since the limited learner is in most respects a pre-school child, imitation is the method which will be most used. Teaching experiences assembled from many sources show that the following rules are most effective;

(a) Begin instruction at the child's level;
(b) Teach each specific response through imitation;
(c) Encourage successes by adequate notice and praise (the fact that the child has improved is more important than the amount of improvement);
(d) Do the same type of thing at the same time each day;
(e) Do not keep the child at one task for a long period;
(f) Encourage deep breathing.

5. The limited learner usually shows some of the following tendencies or symptoms: (1) an inability to remember; (2) a wandering attention; (3) an imbalance in his behaviour; (4) command of a small stock of words; and (5) awkwardness in handling things. These disabilities must be remembered by the person who is giving the training.

Because of these learning handicaps the parent or teacher should observe the following rules when teaching a limited learner.

(a) Say "Do this" instead of "Don't do that". Avoid antagonizing the child. Be positive in your directions rather than negative.

(b) Treat each lesson as a game to avoid forcing the child. Suggest a new game instead of insisting on an old one.

(c) Have your materials ready or immediately available. Do not start teaching without more lesson material than you think you will need.

(d) If the child fails, do not scold him. Encouragment may help but scolding, threatening, scorn and reproof never do.

(e) Many repetitions are needed for teaching limited learners. They need many times the amount of repetition required by the normal child. Do not assume that the limited learner is bored when you are or that he has learned a task when a much younger child in the family has mastered it.

(f) Proceed slowly. The parent must guard against impatience or any tendency to force the pace of learning.

(g) The tasks given must be simple enough to provide more successes than failures. The child must succeed at something every day.

6. This course for limited learners has been organized under the following headings:

(a) Sense Training
(b) Rhythm and Language
(c) Practical Training.

The daily work should be organized into short periods and the various jobs given a definite time. If the plan were written down it might look something like this - (1) naming objects - 5 minutes; (2) naming sounds - 5 minutes; (3) Stringing Beads - 5 minutes; (4) Cutting Paper - 5 minutes; (5) Touch Training - 3 minutes; (6) Nursery Rhymes - 5 minutes; (7) Marching - 5 minutes; (8) Sorting - 5 minutes; (9) Taste Training - 2 minutes; (10) Games - 5 minutes.

7. A copy of the Vineland Social Maturity Scale accompanies this advisement. This scale lists many of the common achievements which are performed by children at each age level. The parent can check up annually by means of this scale.

Books and Materials:

1. Teach Me - Mental Health Unit, Division of Public Institutions, Department of Social Security, St. Paul, Minnesota.
2. The Vineland Social Maturity Scale.

SENSE TRAINING

1. The purpose of sense training is to get the child to use speech and words correctly as a response to seeing, hearing, touching, tasting and smelling. The child learns by imitating the teacher's response. By practice in using his senses the child builds up a stock of words which are useful to him.

This does not mean that the child will learn to recognize printed words or written words. He must build up and use in conversation a large stock of spoken words before he makes any attempt at learning to read.

2. Sight Training - The child should learn to recognize and name common objects. In the first lessons real objects should be used. At a later stage, toys or pictures may be used.

If the child cannot say the words, he may learn to point to the object or picture or to demonstrate an action word. Words which cannot be pictured should be demonstrated.

The teacher should start with two or three objects or toys which can be pointed out as they are named. The child will then be asked to point to or touch and name each object. Other objects will be added as soon as the first group is known.

3. Touch Training - A set of common objects should be kept or put into a brightly coloured bag with a drawstring. The child, after feeling the object without seeing it, is asked to name it. When he has named it, it is withdrawn from the bag to prove that he is correct.

4. Training In Hearing - Obtain a variety of whistles, horns and noisemakers. From behind a screen choose one of them to produce a noise or a musical sound. The child is trained to name the source of the sound. The usual household sounds can be put to use in training the child's hearing. Noises may be made by striking bottles, kitchenware or dishes with a small stick.

5. Training to Taste - The materials may be kept in a set of small corked bottles. A glass or plastic rod may be used to place a small amount on the child's tongue. Training may begin with salt, sugar and vinegar. The child must be taught to taste things and not to swallow them.

6. Training to Smell - A set of small corked bottles is used for this training. The uncorked bottle is placed under the child's nose and he is shown how to sniff in. The name of the substance is repeated several times.

7. Colour Perception and Discrimination - Small pieces of red, yellow, blue and green cloth have been found effective in teaching colour. Pieces of coloured paper, pegs, sticks, marbles or blocks may be used for variety.

(a) Matching - small pieces of brightly coloured cloth are given to the child to be matched with larger pieces of the same colours. The teacher points to the larger piece and asks the child to find a small piece of the same colour.
(b) Naming - The teacher picks up a small piece of cloth and asks the child to name the colour.
(c) Selecting - The child picks up a piece the same colour as has been named by the teacher.
(d) Discrimination - Orange and yellow may be confused. These should be mounted side by side on a piece of cardboard for intensive drill.
(e) Sorting - Pieces of any material can be sorted according to colour.
(f) Peg Board - An assortment of brightly coloured pegs may be secured for the peg-board. The child may make rows or patterns of pegs.

8. Form Discrimination - The necessary flat shapes may be cut from cardboard or cloth. The solid forms may be collected in quantities for training in matching pairs and selecting forms or shapes named by the teacher. For solid objects a six quart basket makes a good receptacle.

9. Sound Discrimination - This exercise follows those given under No. 4 - Training in Hearing. The child is asked to imitate sounds made by the teacher. One purpose of the training is to train the child to discriminate between singular and plural forms. Sometimes the child will check his speech patterns in a mirror.

10. A Basic List of Words - Two lists of words are given. List I contains words for which pictures may be secured. List II contains words which should be demonstrated as they cannot be pictured adequately. The purpose is to develop speech and language long before reading is attempted. If the child cannot say the words he may point to the object or picture. The words are given in a planned order in both lists. After the child has a stock of words, he may begin to give definitions in terms of use such as "Milk is to drink" or "Bed is for sleeping", etc.

List I - Picturable Words
Mum, dad, ear, hand, nose, eye, mouth, teeth, finger, toes, shoe, spoon, bottle, cup, hair, shirt, stocking towel, mother, arm, tooth, brush, coat, button, father, doll, ball, hat, cookie, milk, comb, foot, chair, table, dog, cat, boy, girl, soap, neck, bed, bear, egg, door, balloon, kitten, bell, cone, one, two, three, a lot of, orange, cow, pig, horse, pot, car, box, apple, red, blue, green, glass, duck, wagon, bath, boat, house, drum, clock, spool, train, penny, stick, back, chin, banana, fork, knife, key, nail, hammer, candy, pail, basket, store, paper, four, five, room, umbrella, ground, black, white, can, block, brick, rubber, robin, fire, sun, bird, aunt, uncle, horn, frog, nest, cake, bread, butter, cross, circle, square, yellow, broom, kettle, face, chicken, sand, gate, letter, tree, leaf, lamp, nail, pencil, potato, carrot, wall, meat, six, seven, sky, flower, star, stone, rake, stove, teapot, oven, tent, mat, hall, kitchen, moon, pumpkin, paint, bag, brown, mud, jar, crayon, iron, saucer, marble, hook, bean.

List II - Words to be Demonstrated or Acted
Up, down, kick, roll, drink, eat, talk, look, see, don't, wash, come, give, stop, open, hot, ride, quack, find, want, bark, bang, pocket, drop, hold, shut, fast, game, fix, keep, hit, big, little, on, off, fast, soft, round, go, wet, dry, run, jump, hop, cold, sit, watch, bring, bite, kiss, laugh, cry, lace, taste, smell, listen, feel, touch, not, lift, fall, pile, draw, fill, put, walk, slow, sweep, dust, dig, smooth, buzz, rap, long, short, fill, I, me, she it, they, we, her, his, their, pray, rough, tall, right, left, night, day, wind, rain, wink, swim, find, race, hard, pay.

RHYTHM AND LANGUAGE

1. Records and recordings can be used by many children without requiring the constant attention of the parent. The child can by this method secure a great many repetitions of a rhyme or story without being dependent on someone else. If he imitates the words and music given by means of the record, he uses another approach to words. The following list of records is progressive in difficulty.

(a) Mother Goose Rhymes (Decca #K1)
(b) Nursery Rhymes (Decca #K2)
(c) Fairy Tales (Decca #K3)
(d) Album (Columbia #J20)
(e) Winnie The Pooh (Decca #K12)
(f) More Winnie The Pooh (Decca #K15)
(g) Hansel & Gretel (Victor)
(h) Snow White (Victor J8)
(i) The Little Engine That Could (Bluebird B.C36)
(j) Little Black Sambo (Bluebird B.C.6)
(k) Robin Hood (Victor #P35)
(l) Songs of the Zoo (Bluebird B.C. 44)

2. Records may be used for exercise and movement such as walking, marching, stepping, running, jumping and skipping.
(a) London Bridge, etc. - Victor #20806
(b) Coronation March - Victor #20150
(c) Rhythms For Children - Victor #20162
(d) Rhythm Medleys No. 1 & No. 2 - Victor #20526
(e) Legend of Bells - Victor #20164
(f) Elfin Dance (Grieg) - Victor #20079

PRACTICAL TRAINING

Jobs should be found to employ the child's time. These jobs should be of short duration and of a sort well within the child's ability. In view of the variation in the abilities of limited learners, it is impossible to make a list which starts with the easiest and proceeds by equal steps to the most difficult. The order of the jobs listed below is suggestive of their difficulty.

1. Scribbling with crayon or chalk.
2. Sorting into two piles from a basket containing a half dozen each of two unlike things such as - onions and potatoes, clothespins and skewers, chestnuts and stones, etc.
3. Piling blocks one on top of the other.
4. Winding cord or clothesline on a large bobbin.
5. Sorting pairs of things - Keep a basket filled with at least two of each of the following: clothespins, small bottles, spoons, sealer rings, cans, etc.
6. Selecting all of one kind - Keep a basket of horse chestnuts, pebbles, shells, etc. Select one and have the child pick out all the others like it.
7. Colouring - Trace simple outlines on wrapping paper using paper boxes or empty cans as forms. Let the pupil fill in the spaces with chalk or crayon. Gradually decrease the size as the ability to keep within the lines improves.
8. Stringing large kindergarten beads on a lace.
9. Walking a straight line.
10. Balancing on one foot.
11. Sweeping the concrete walk.
12. Cutting out large simple geometric forms.
13. Tracing around circles, squares, triangles.
14. Matching pictures.
15. Matching geometric forms.
16. Putting a 2-piece picture together to match another picture.
17. Outlining forms with squash or melon seeds.
18. Sweeping the verandah.
19. Using the Buttoning Frames. Two pieces of cloth are attached to the edges of a board or frame. One or more buttons and holes are provided for practice in buttoning.

20. Using a Zipper Frame (Similar to No. 16)
21. Throwing bean bags at a large target (like a door) from a distance of 6 feet.
22. Putting pieces of a square or circle together to match a whole square or circle.
23. Jig Saw Puzzles - 2, 3, and 4 pieces.
24. Tracing card-board cut-outs.
25. Dusting the top of a table.
26. Riding a tricycle.
27. Playing in the sand box with pail and shovel.
28. Finger painting - The paste material for finger paint is made according to the following recipe - ½ cup Linits Starch
    1 1/3 cup boiling water
    ½ cup Soap Flakes
    1 tsp. glycerine.

    This paste material is kept in a tightly covered jar. A small quantity can be placed in a 6 hole cookie pan. A small amount of dry tempera is added to the paste to make the desired colour.

    The child and teacher should each have an apron. A flat sheet of newspaper is spread out on the table. The child takes some of the coloured paste and smears it over the paper. Patterns are made with the fingers.
29. Drawing enclosed spaces with chalk or crayon.
30. Cutting out large pictures from catalogue.
31. Winding 6 feet of thread on a spool.
32. Sorting according to length pieces of string, wood, wire, etc.
33. Stringing small beads.
34. Dusting a chair.
35. Sweeping the kitchen.
36. Making vertical strokes with chalk or crayon.
37. Shoe lacing frame - Two sides of a wooden box are shaped roughly as a shoe. Holes are bored to practice lacing with very heavy cord or light clothesline.
38. Buttoning Frame with small buttons.
39. Modelling in plasticene - Teach the child to roll out the material into various simple shapes such as a ball or a thin cylinder.
40. Throwing bean bags into a 10" hole.
41. Hammering - pieces of wood with a small nail through them may be hammered into a piece of ten-test wallboard.
42. Assembling and dis-assembling nested boxes.
43. Making a vertical and then a horizontal stroke to form a cross (call them dandelion seeds).
44. Six-piece Jig Saw Puzzles.
45. Nursery School Toys - See pamphlet from St. George's School For Child Study, St. George St. Toronto.
46. Drawing around a cup or saucer, then colouring.
47. Using a circle (3 or 4 inches in diameter) cut from cardboard as a stencil and then colour it calling it a ball, orange, etc.
48. Finger Paint Patterns on white paper.
49. Hopping.
50. Walking a curved line.
51. Jumping over a string 3" from floor.
52. Bouncing a large ball.
53. Setting the table.

54. Balancing on both toes.
55. Walking a line holding a cup of water.
56. Spool knitting.
57. Assembling pull toys.
58. Winding yarn around a frame.
59. Hoeing in the garden in summer.
60. Raking.
61. Sewing cards. These may be made at home. Simple geometric outlines are made with holes punched one inch apart. Brightly coloured yarn and a blunt needle are used.
62. Making horizontal lines on paper with crayon.
63. Polishing furniture.
64. Drying dishes.
65. Sorting linen.
66. Sawing wood.
67. Making a bed.
68. Putting away dishes.
69. Rake knitting.
70. Ironing flat pieces with a cold iron.
71. Sanding wood - Buy a sand block at the hardware store.
72. Boiling the kettle.
73. Making porridge.
74. Peeling potatoes.
75. Coping Saw Carpentry.
76. Painting with enamel and a brush.
77. Sawing to a line with a cross cut or rip saw.

Books

1. Coping Saw Carpentry - Moyer
2. Palmer - Coping Saw Cut-Outs - Gage
3. Fowler - Homemade Playthings and Materials to Promote Success in Routine Activities - Cornell Bulletin For Homemakers - Cornell University, Ithaca, N.Y.
4. Games For Home Play - Child Development Deparment, Iowa State College, Ames, Iowa.
5. Homemade Play Equipment - Child Development Department, Iowa State College, Ames, Iowa.
6. Nursery School Equipment - St. George's School For Child Study, 98 St. George St., Toronto.
7. Homemade Furniture For Children - Child Development Department, Iowa State College, Ames, Iowa.

Key No. 8A - Cerebral Palsy

Advisement for

Name	Age	Grade	School

Note - This is a compilation of suggestions, for the education of a child with cerebral palsy. Each paragraph on the attached pages is numbered. Any special suggestions are given under Examiner's Remarks.

Examiner's Remarks

Key No. 8A - Cerebral Palsy

Advisement for

Name	Age	Grade	School

Note - This is a compilation of suggestions, for the education of a child with cerebral palsy. Each paragraph on the attached pages is numbered. Any special suggestions are given under Examiner's Remarks.

Examiner's Remarks

GENERAL NOTES

1. Cerebral Palsy, Spastic Paralysis and Birth Injury are terms used to describe a condition where a child cannot do one or more of the following things normally:

(a) speak without making faces and without effort;
(b) use his arms and hands without jerky movements;
(c) walk normally.

2. The most important thing for the parent to do is to see a medical doctor who is qualifiod to recognize the three types of cerebral palsy as follows:
(a) spastic (b) athetoid (c) ataxic.

3. The aim of treatment for the cerebral palsied child is to help him to develop the highest degree of independence normally possible.

4. Experts suggest that the order of treatment for the cerebral palsied child should be (1) Speech (2) Arms and (3) Legs.

5. Cerebral palsied children do best if they live a quiet life where
(a) they get more rest and sleep than normal children;
(b) they are secure in the knowledge of the love and esteem of their parents and family;
(c) they have properly planned play activities and contacts with children of their own age.

6. The parents must bear in mind that teaching and training a cerebral palsied child is a slow process. It may take months or even years to train the muscles to react sufficiently well for the child to make ordinary movements of his arms and legs.

7. The exercises suggested in this advisement should be done daily, except Saturday and Sunday which should be rest days. Exercises chosen for the child should be done at the same hour each day. The room should be quiet and warm. The parent should never be in a hurry, under tension or bothered with other duties when the cerebral palsied child's training programme is being carried out.

8. Two pamphlets are being sent with this advisement for the use of the parent in training a cerebral palsied child. These pamphlets show home-made equipment which may be made. The parents should read these pamphlets for the meaning of words and terms which cannot be explained fully in these short paragraphs.

9. The education and training of a cerebral palsied child is given under the following heads:

I. Relaxation
II. Speech Training
III. Muscle Training
IV. Recreation
V. Other helps.

10. Daily exercises will help to keep the muscles in condition to function, help to reduce contractions of the muscles and develop better control. The exercises should never be carried on till the child is tired. Many exercises can be given in play and games.

11. The following booklets are sent with this advisement for the use of the parent or teacher.

1. Handbook on Physical Therapy for Cerebral Palsy - green book. Published by the Ohio Society For Crippled Children, Inc.
2. Improvised Equipment For The Physically Handicapped - yellow book Published by the Joint Orthopedic Nursing Advisory Service of the National Organization for Public Health Nursing and the National League of Nursing Education, 1790 Broadway, New York 19, N.Y.

NOTES ON RELAXATION

1. Half the child's difficulties will be overcome if he can be taught to relax. His chief difficulty in his waking hours is that his muscles do not relax or that when one muscle is relaxed another one is tense. The nerves which operate the muscles respond in unusual ways because his nervous system is out of proper balance.

2. In teaching a cerebral palsied child to relax, physical security is absolutely necessary. A mat on the floor, a wide table or a relaxing chair are suitable places in which to practise relaxation exercises.

3. Sand bags for the feet and weighted mittens for the hands may help the child to relax particularly if he is an athetoid.

4. Rhythm is important in teaching relaxation. Music with a definite rhythm might be played and the child encouraged to hum or mark time with those parts of his body over which he has best control (head, shoulders, feet, hands). There must be daily repetition of exercises such as beating with sticks, beating a drum, tapping a triangle to music.

The following records are useful:

Polly Put The Kettle On
Waltz (Shubert)
John Peel (for clapping or marking time)
March From the Nutcracker Suite (Tschaikowsky)
The Blue Danube (or other Strauss Waltzes).

5. Massage for cerebral palsied children does not mean the same thing as is understood in regular medical usage. "Soothing rubbing" is a better description. Sometimes slow gentle "soothing rubbing" over tense muscles will help relaxation. Gentle movements of the child's fingers, wrist, elbow or arm may also help. Soft music played at the same time may distract and soothe the child.

6. The main purpose is to get the child to acquire an ability to relax. In the first stages, he may require all the helps listed in the previous paragraphs. The aim is to develop the power of relaxing himself without other aids. A simple method of relaxation for physically normal persons is as follows:

(1) Arch the back. This may be done by placing him on a chair so that his feet and head are lower than his hips. It is more simple to raise his hips when he is lying on his back.
(2) Stretch out (Stiffen every muscle) and then let go. (The word relax should not be used.) Do this a few times.

(3) Close the eyes and breathe through the mouth. The child should learn to yawn at this stage of relaxation.
(4) When the arm or leg may be lifted or moved freely without opposition, the person is relaxed. Another sign of relaxation is abdominal (stomach) breathing.
(5) Maintain this state for a few minutes.

Books
1. Jacobson - You Must Relax.

Note - The development of relaxation is usually very slow due to the pull of antagonistic muscles. Antagonistic muscles should be relaxed at the same time in order to develop an equal pull.

II NOTES ON SPEECH TRAINING

1. Before speech training is given, the type of cerebral palsy should be known (a) spastic (b) athetoid (c) ataxic. The child's hearing should be checked. Left-handedness or right-handedness should be determined.

2. Specially trained speech therapists should be employed where they are available.

3. Relaxation exercises should precede all speech training. Breathing exercises must be taught and practised.

4. Exercises which may be helpful to a parent are:
(a) Blowing Exercises - Use feathers, balloons, bubbles, horns, candles, whistles, etc. These exercises interest the child and at the same time correct breathing is being developed. Whistling is helpful.
(b) Encourage the Child to make Sounds - Sounds are better than signs.
(c) If the condition is not too severe, Use a Mirror - Encourage the child to form words by imitation. He should use the mirror to check his ability in imitating the sound or the word given. It should be made clear to the child that he should try even if the sound is not recognizable at first. Train the child to watch the mouth and to avoid eye contact.
(d) Do not anticipate a word for the child and do not help him to finish a word.
(e) Do not use baby talk with him.
(f) Use a toy telephone as an aid in conversation.
(g) Grimacing or making faces while speaking may be improved by sitting in a relaxing chair in front of a mirror. It will help the child if he places his fingers on tense muscles and feels muscles working out of turn.
(h) Drooling - Suggest to the child that he chew on imaginary food or give him chewing gum. (Chewing increases the swallowing reflex and the saliva goes down the throat). Deep breathing helps drooling. NEVER SCOLD OR NAG ABOUT DROOLING. Praise the child when he remembers to keep his mouth closed and swallows saliva. Pride in his personal appearance should be encouraged.

Books
1. Jacobson - You Must Relax
2. Barrows & Hall - Games and Jingles
3. Shaw - You Can Help Your Child.

III NOTES ON MUSCLE RE-EDUCATION

1. Each type of cerebral palsy should have a different treatment. For this reason, it is impossible to over-value the importance of early diagnosis by a specialist. By beginning treatment at the earliest possible moment some of the faulty movements and posture can be avoided. Some of the muscle contractures may be prevented. Unless an accurate diagnosis of the exact type of cerebral palsy is made by the doctor, it is impossible to have treatment instituted which is specific for a particular case.

2. In Spastic Paralysis, the treatment must start with relaxation and from the relaxed position all exercises must be performed very slowly.
The instructor first carries out the movement of the exercise until the child gets the feel of it. The next step is for the instructor and the child to do the exercise together. Finally the child attempts to carry out the movement alone.

The child should be allowed to do exercises with his good muscles to get the feel and the relaxation which is desired in the spastic muscles.

Music is a great aid in helping the spastic child to coordinate.

The spastic may begin training in babyhood or early childhood. Such training can be carried out by associating each motion to a rhythm or count if tension does not become aroused.

The spastic needs much repetition of these movements if they are ever to become automatic.

3. The Athetoid Paralytic has an involuntary motion when he is making no attempt to move. Relaxation is much more important in the training of an athetoid than it is for a spastic. Relaxation should be developed to such a high point that it becomes automatic and constant.

After the patient has been taught to relax, simple motions of the large joints are taught before simple motions of the smaller joints. When these have progressed sufficiently, combinations such as elbow and fingers may be practised.

4. In Ataxia, the problem is mainly of balance and of coordination of the hand and eye. Ataxia is caused by any disturbance of the automatic balance control. Due to the lack of muscle tone and the inability of the patient to know where his tongue is, speech tends to become thickened.

5. Exercises and Games For The Hand And Arm

(a) Hand games for the young child whether played alone or in groups have a recreational as well as a muscle training value if tension is not aroused. Examples are:

(i) Simon Says Hands Up
(ii) Here is the Church and Here is the Steeple
(iii) Pease Porridge Hot
(iv) Hand Piling
(v) Making Shadow Pictures.

(b) Sorting, matching and stringing large kindergarten beads. As expertness develops, the beads should get smaller.

(c) Using a Sand Tray or Sand Table - The sand box should include dry and moist sand.

(d) Playing with a large rubber ball.

(e) Carpentry projects.

(f) Toys that are good for hands and arms are:
(i) Large blocks - made of cigar boxes with lids fastened.
(ii) Boxes such as are used for cereal, butter, eggs, etc. make good equipment for playing store.
(iii) Checker boards and checkers.
(iv) Dominoes
(v) Bean bags
(vi) Toy wheel barrows.

(g) Educational toys for hand and finger control as well as hand and eye coordination are:
(i) Large crayons and large chalk sticks can be used on brown paper tacked to an easel.
(ii) Judy Puzzles - These are nursery rhymes illustrated on cardboard and cut into good-sized pieces.
(iii) A Typewriter
(iv) A Printing Set
(v) A Toy Piano
(vi) A Bingo Board
(vii) A Colouring Book.

(h) The parent should purchase sturdy toys which have an educational value. Toys should be well painted and should not have small parts. Large sized toys will have to be used much longer with cerebral palsied than by normal children.

Pencils and handles should be built up so that the child can get a better grasp.

Toys encourage hand and arm movements.

In play activities, encouragement and praise should be given freely as a reward for his efforts and as a stimulus to continued effort. The child should neither work or play to the stage of fatigue.

(i) A Play or Game Table is very useful. It is a cubicle about the height of the child's waist, with a door which can be fastened securely. This cubicle is built into a table with a rim so that the toys cannot fall on the floor. When the child is placed in this cubicle he has a feeling of security and usually relaxes, particularly when provided with a good supply of toys and playthings.

6. Exercises For Feet and Legs

(a) Balance exercises are essential. Duck or ski shoes have been used successfully. The skis should be firmly attached to the child's shoes. Skis should not be continued after the child has mastered balance in some degree.

(b) Progressive exercises in learning to walk should be approved by medical authorities and carried out under medical supervision. The following opinions are quoted for your guidance:
(i) Parallel bars are helpful but walkers are questionable;
(ii) Mirrors are helpful in watching posture;
(iii) Rubber-soled shoes aid in giving the child a sense of security;
(iv) The stairs can be used to train the pupil to go up and down steps;
(v) Skis with handgrips are sometimes used by trained therapists.

7. Teaching The Child Independence and How To Care For Himself

(a) Dressing and Undressing - His clothing should be planned so that the fastenings will be within his ability to do and undo. Goloshes and rubbers should be about a size larger than is necessary for normal children. (They must not be so loose as to cause difficulty in walking).

Montessori Boards are very helpful in teaching the movements needed in managing fastenings for clothes. These boards can be made at home as they consist of two pieces of stout cloth fastened to the outside edges of the board. The inner edges are fastened with buttons, hooks and eyes or a zipper.

For lacing the end is taken out of a wooden box with end measurements about 6" x 6". Holes are bored in the sides.

Let the child practise buttoning his coat around a pillow.

Large dolls are useful in giving training in dressing and undressing.

(b) Tidiness
(i) The child should have his own hooks, drawers and shelves where they are convenient and easy to reach.
(ii) The bed should be low enough to allow the child to get into it without help.

IV NOTES ON RECREATION

Recreation is very necessary for cerebral palsied children, but must be planned to suit his capabilities and needs. Loneliness is so prominent in his life that the mother must find ways and means of securing companionship for him. The following suggestions should be carried out as far as possible:

(a) The child should share in the family interests and pleasures.
(b) He must have interests outside the home and meet other children of his own age.
(c) Hobbies should be encouraged.
(d) Sunday School is a suitable outing and a satisfactory recreational outlet.

V OTHER HELPS

1. A subscription to the magazine "The Spastic Child" costs $2.00 per year. The address is - The Spastic Review, 1751 North Fairmount, Wichita 6, Kansas.

2. Books other than those mentioned in this advisement may be secured by making a request in writing to The Inspector of Auxiliary Classes, Department of Education, Toronto.

3. A typewriter which has not a stiff mechanical action is used by some children for writing. This should be tried in cases where muscular incoordinations make writing difficult.

4. A board on which the letters of the alphabet, the numbers 1-10, and the words "YES" and "NO" have been painted can be used in cases where speech is impossible.

5. The walker in which the child sits appears to be the least useful vehicle which has been used in training the cerebral palsied. This is particularly true if the design remains unchanged. The vehicles and gadgets made for a crippled child should be designed if possible so that they can be further developed or changed from time to time.

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